Drinking Water Surveillance Program

THUNDER BAY (BARE POINT) WATER TREATMENT PLANT

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THUNDER BAY (BARE POINT) WATER TREATMENT PLANT

DRINKING WATER SURVEILLANCE PROGRAM

ANNUAL REPORT 1989

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EXECUTIVE SUMMARY

DRINKING WATER SURVEILLANCE PROGRAM

THUNDER BAY (BARE POINT) WATER TREATMENT PLANT
1989 ANNUAL REPORT

The Drinking Water Surveillance Program (DWSP) for Ontario is a monitoring program providing immediate, reliable, current information on drinking water quality. The DWSP officially began in April 1986 and is designed to eventually include all municipal supplies in Ontario. In 1989, 65 plants were being monitored.

The Thunder Bay (Bare Point) Water Treatment Plant is a direct filtration plant which treats water from Lake Superior. The treatment process consists of coagulation, flocculation, filtration and disinfection. The plant has a design capacity of 70.46 x 1000 m^3/day. This plant together with the Loch Lomond Supply serves a population of approximately 113,000.

The raw and treated water from the plant and from four locations in the distribution system was sampled monthly for approximately 180 parameters. Parameters were divided into the following groups: Bacteriological, Inorganic and Physical (Laboratory Chemistry, Field Chemistry and Metals) and Organic (Chloroaromatics, Chlorophenols, Pesticides and PCB, Phenolics, Polyaromatic Hydrocarbons, Specific Pesticides and Volatiles). Chlorophenols and Specific Pesticides were analyzed in June and November only.

A summary of results is shown in Table 1.

Inorganic and Physical parameters were below any applicable health related ODWOs.

Of a total of approximately 110 Organic parameters tested for on a monthly basis, none exceeded health related guidelines.

During 1989 the DWSP sampling results indicated that the Thunder Bay (Bare Point) Water Treatment Plant produced good quality water at the plant and this quality was maintained in the distribution system.

TABLE A

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP)

SUMMARY TABLE BY SCAN

SCAN	RAW			TREATED			SITE 1			SITE 3			SITE 2			SITE 4		
	TESTS	POSITIVE	%POSITIVE	TESTS	POSITIVE	%POSITIVE	TESTS	POSITIVE	%POSITIVE	TESTS	POSITIVE	%POSITIVE	TESTS	POSITIVE	%POSITIVE	TESTS	POSITIVE	%POSITIVE
BACTERIOLOGICAL	5	2	40	7	0	0	4	0	0	3	0	0	4	0	0	3	0	0
CHEMISTRY (FLD)	35	32	91	60	60	100	38	37	97	30	30	100	20	20	100	34	34	100
CHEMISTRY (LAB)	220	164	74	220	138	62	140	102	72	159	108	67	70	56	80	168	124	73
METALS	264	102	38	264	89	33	188	81	43	212	83	39	94	41	43	212	91	42
CHLOROAROMATICS	154	0	0	154	0	0	56	0	0	70	0	0	28	0	0	56	0	0
CHLOROPHENOLS	12	0	0	12	0	0	.	.	.	.	.	.	.	.	.	.	.	.
PAH	176	0	0	176	0	0	.	.	.	.	.	.	.	.	.	.	.	.
PESTICIDES & PCB	374	0	0	374	0	0	136	0	0	105	0	0	68	0	0	97	0	0
PHENOLICS	11	5	45	11	6	54	.	.	.	.	.	.	.	.	.	.	.	.
SPECIFIC PESTICIDES	64	0	0	64	0	0	4	0	0	5	0	0	2	0	0	4	0	0
VOLATILES	261	1	0	261	29	11	87	9	10	116	12	10	29	4	13	145	15	10
TOTAL	1576	306		1603	322		653	229		700	233		315	121		719	264	

NO KNOWN HEALTH RELATED GUIDELINES WERE EXCEEDED

A POSITIVE VALUE DENOTES THAT THE RESULT IS GREATER THAN THE STATISTICAL LIMIT OF DETECTION AND IS QUANTIFIABLE
A '.' INDICATES THAT NO SAMPLE WAS TAKEN

DRINKING WATER SURVEILLANCE PROGRAM

THUNDER BAY (BARE POINT) WATER TREATMENT PLANT
1989 ANNUAL REPORT

INTRODUCTION

The Drinking Water Surveillance Program (DWSP) for Ontario is a monitoring program providing immediate, reliable, current information on drinking water quality. The DWSP officially began in April 1986 and is designed to eventually include all municipal supplies in Ontario. In 1989, 65 plants were being monitored. The DWSP was initiated at the Thunder Bay (Bare Point) Water Treatment Plant in May 1988. An Annual report was published for 1988 (ISSN 0843-8285).

This report contains information and results for 1989.

PLANT DESCRIPTION

The Thunder Bay (Bare Point) Water Treatment Plant is a direct filtration plant which treats water from Lake Superior. The process consists of coagulation, flocculation, filtration and disinfection. A polyelectrolyte is added as a coagulant aid. The plant has a rated capacity of 70.46 x 1000 m^3/day and sample day flows ranging from 32.5 x 1000 m^3/day to 46 x 1000 m^3/day. This plant together with the Loch Lomond supply serves a population of 113,000.

The plant location is shown in Figure 1. Plant process details, in a block schematic, are shown in Figure 2. General plant information is presented in Table 2.

SAMPLING LOCATIONS

Water samples were obtained from six DWSP approved locations;

i) Plant Raw - The water originated from the raw water wet well prior to chlorination and was sampled through a stainless steel pump and sample line. The sample tap is located in the plant laboratory.

ii) Plant Treated - The water originated from the highlift discharge after addition of all treatment chemicals and was sampled through a stainless steel sample line. The sample tap is located in the plant laboratory.

iii) Distribution System - Site 1 - The house location and sampling conditions are unavailable. This site was sampled four times in 1989.

iv) Distribution System - Site 2 - The house location and sampling conditions are unavailable. This site was sampled twice in 1989.

v) Distribution System - Site 3 - The house location and sampling conditions are unavailable. This site

FIGURE 1

DRINKING WATER SURVEILLANCE PROGRAM

SITE LOCATION MAP

THUNDER BAY (BARE POINT) WATER SUPPLY SYSTEM

FIGURE 2

THUNDER BAY (BARE POINT) WATER TREATMENT PLANT

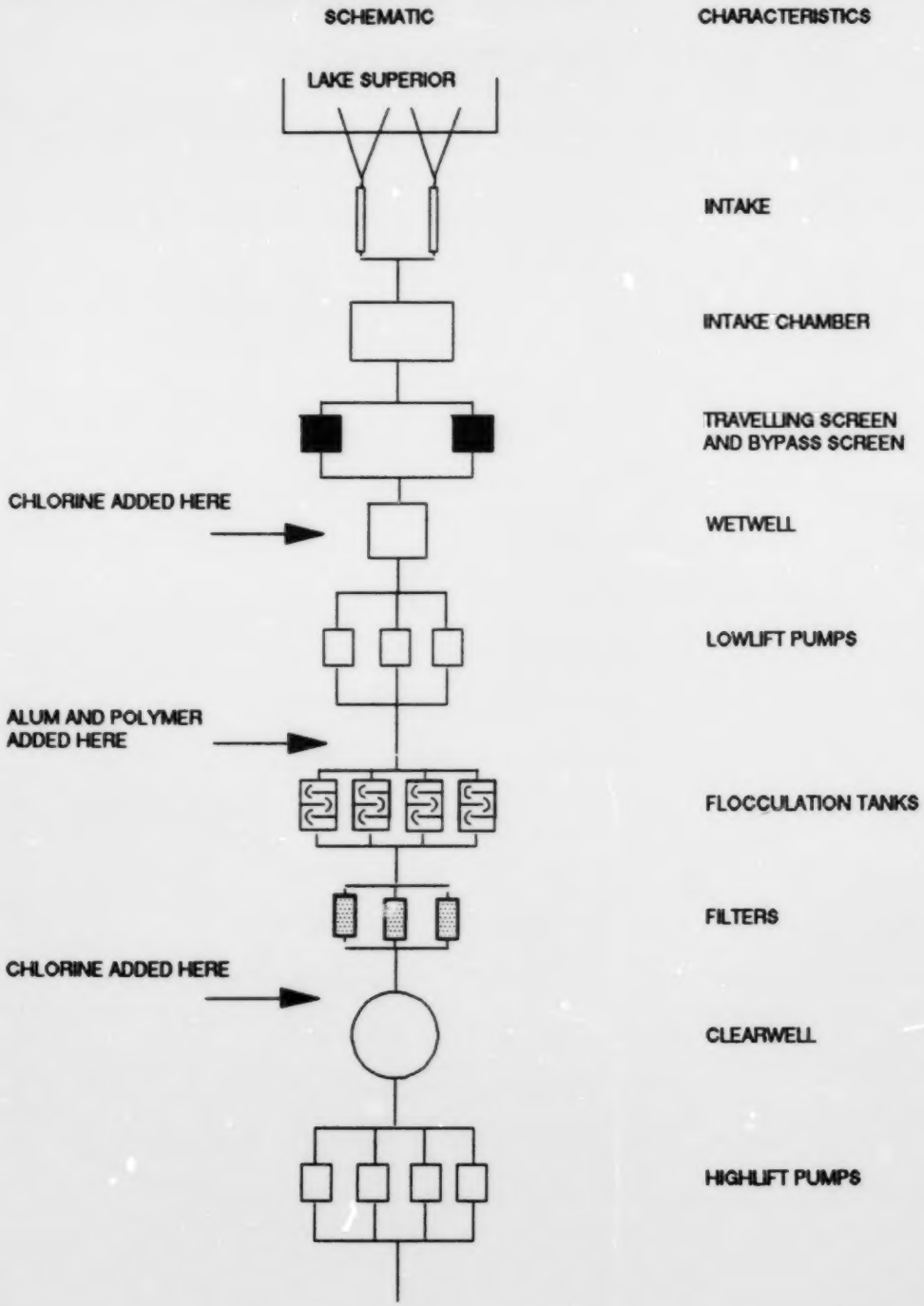

TABLE 2

DRINKING WATER SURVEILLANCE PROGRAM ANNUAL REPORT

GENERAL INFORMATION

THUNDER BAY (BARE POINT) WATER TREATMENT PLANT

LOCATION:	BARE POINT ROAD, RR #13 THUNDER BAY, ONTARIO P7B 5E4 (807-)
SOURCE:	RAW WATER SOURCE - LAKE SUPERIOR
RATED CAPACITY:	70.46 (1000 M^3/DAY)
OPERATION:	MUNICIPAL
PLANT SUPERINTENDENT:	D. SHANTZ
MINISTRY REGION:	NORTHWEST
DISTRICT OFFICER:	D. MURRAY

MUNICIPALITY SERVED	POPULATION
THUNDER BAY	113,000

was sampled five times in 1989.

vi) Distribution System - Site 4 - The house location and sampling conditions are unavailable. This site was sampled five times in 1989.

SAMPLING AND ANALYSES

Sample lines in the plant were flushed prior to sampling to ensure that the water obtained was indicative of its origin and not residual water standing in the sample line.

At the distribution system sites two types of samples were obtained:a standing and a free flow. The standing sample consisted of water that had been in the household plumbing and service connection for minimum of six hours. These samples are used to make an assessment of the amount by which the levels of inorganic compounds and metals may be changed on standing due to leaching from (or deposition on) the plumbing system. The only analyses carried out on the standing samples therefore, are General Chemistry and Metals. The free flow sample represented fresh water from the distribution main that had been flowing at the sample tap for five minutes before being sampled.

Attempts were made to capture the same block of water at each sampling point by taking the retention time into consideration.

The retention time was calculated by dividing the volume of water between the two sampling points by the sample day flow. For example, if it was determined that the retention time within the plant was five hours then there would be a five hour interval between the raw and treated sampling. Similarly, if it was estimated that it took approximately one day for the water to travel from the plant to the distribution system site, this site would be sampled one day after the treated water from the plant.

Stringent DWSP sampling protocols were followed to ensure that all samples were taken in a uniform manner.

The Thunder Bay (Bare Point) Water Treatment Plant raw and treated water and four distribution system locations were sampled for approximately 180 parameters on a monthly basis. The Specific Pesticides and Chlorophenols scans were sampled in June and November only. Polyaromatic Hydrocarbons and Phenolics were only analyzed in the raw and treated water at the plant. As of August the triazine pesticides were only analyzed in the raw and treated water. Laboratory analysis was conducted at the Ministry of the Environment facilities in Rexdale, Ontario.

RESULTS

Field measurements were recorded on the day of sampling and were entered on the DWSP data base as submitted by plant personnel.

Table 3 contains information on the sample day retention time, flow rate and treatment chemicals used and their associated dosages.

Table 4 is a summary break-down of the number of water samples analyzed for by parameter and by water type. The number of times that a positive or trace result was detected is also reported.

Positive denotes that the result is greater than the statistical limit of detection established by the Ministry of the Environment (MOE) laboratory staff and is quantifiable. Trace (<T) denotes that the level measured is greater than the lowest value detectable by the method but lies so close to the detection limit that it cannot be confidently quantified.

Table 5 presents the results for parameters detected on at least one occasion.

Table 6 lists all parameters analyzed in the DWSP.

Associated guidelines and detection limits are also supplied on both tables. Parameters are listed alphabetically within each scan.

DISCUSSION

General

Water quality is judged by comparison with the Ontario Drinking Water Objectives (ODWOs) as defined in the 1984 publication (ISBN 0-7743-8985-0). The Province of Ontario has health related and aesthetic objectives for 49 parameters, these are currently under review. When an ODWO is not available guidelines/limits from other agencies are consulted. The Parameters Listing System (PALIS) recently published (ISBN 0-7729-4461-X) by the MOE catalogues and keeps current over 1750 guidelines for 650 parameters from agencies throughout the world.

Many of the compounds detected are naturally occurring or are treatment by-products.

Plant operational personnel address occurrences of taste and odour or biological water quality parameters. The DWSP does not assess these aspects of the water supply.

As stated under Results, traces do not indicate quantifiable values, as defined by established MOE Laboratory analytical reporting protocols. The occasional finding of a trace level of a contaminant is thus not considered to be significant. They can be useful in trend analysis, or confirmation of the presence of a specific contaminant that is repeatedly detected at these levels.

DISCUSSION OF GUIDELINES AND LIMITS THEREFORE, IS ONLY CONDUCTED ON POSITIVE RESULTS.

Bacteriology

Results for the Bacteriology scan indicate that there were no positive values reported. Bacteriological results were very limited in 1989, the Thunder Bay laboratory will be performing all bacteriological testing for the Thunder Bay plants since the sample do not arrive at the Toronto laboratories within the allotted time period.

Guidelines for bacteriological sampling and testing of a supply are developed to maintain a proper supervision of its bacteriological quality; the routine monitoring program usually requires the taking of multiple samples in a given system. Full interpretation of bacteriological quality cannot be made on the basis of single samples. Further, bacteriological limits were developed in acknowledgement that the presence of coliforms may be detected due to their non-uniform distribution throughout the distribution system and the fact that their enumeration is subject to considerable variation. Routine bacteriological monitoring, as outlined in the ODWOs is carried out by the operating authority.

Inorganic and Physical Parameters

Laboratory and Field Chemistry

The results for Laboratory and Field Chemistry scans were below any applicable health related ODWOs.

The Langelier Index is used extensively in estimating the corrosion potential of water. An increasingly negative index indicates the increasing possibility of corrosion. It is considered sound engineering practice to maintain a slightly positive Langelier Index. The Langelier Index for Bare Point is consistently negative.

Metals

The results reported for the Metal scan were below any applicable ODWOs.

Elevated levels of Copper and Zinc were detected in the standing samples as compared to the free flow distribution samples, indicating that these metals were leached from the household plumbing as the water stood overnight. The negative Langelier Index indicates potential for corrosion and some metals will be leached in standing samples.

Organic Parameters

Chloroaromatics

The results of the Chloroaromatics scan showed that no chloroaromatics were detected.

Chlorophenols

The results of the Chlorophenol scan showed that no Chlorophenols were detected.

Pesticides and PCB

Results of the Pesticides and PCB scan showed that no PCBs were detected and that two pesticides were detected:

Alpha BHC

Lindane

There are several isomers of BHC (benzene hexachloride); gamma BHC is the active ingredient of the pesticide Lindane, while alpha BHC is the isomer most predominantly found in surface waters of the Great Lakes basin as indicated by results from other water supplies on DWSP.

Alpha BHC was detected at trace levels, in ten raw water samples, six treated water samples, three Site 1, two Site 2, three Site 3 and three Site 4 samples.

Lindane was detected at trace levels, once in the raw water, once in the treated water and once in the Site 2 water.

Specific Pesticides

The results of the Specific Pesticide scan showed that none were detected.

Phenolics

Phenolics were detected in the raw water, ranging from 1.2 µg/L to 4.6 µg/L and in the treated water ranging from 1.0 µg/L to 1.2 µg/L. The maximum desirable concentration of phenolic substances in drinking water is 2.0 µg/L. This limit has been set primarily to prevent the occurrence of undesirable tastes and odours, particularly in chlorinated water. Phenolic compounds are present in the aquatic environment as a result of natural and/or industrial processes.

Polynuclear Aromatic Hydrocarbons (PAH)

The results of the PAH scan showed that no PAHs were detected.

Volatiles

The results of the Volatile scan showed that six parameters, other than Trihalomethanes(THMs) were detected:

Benzene

Toluene

Ethylbenzene

Ortho-Xylene

Styrene

1,1,1-Trichloroethane

The detection of benzene, ethylbenzene, toluene and the xylenes at low, trace levels is a laboratory artifact derived from the analytical methodology.

The detected trace levels of Styrene are also considered to be laboratory artifacts resulting from the polystyrene shipping containers. The sporadic background levels from this source are in the order of 0.05 µg/L.

1,1,1-Trichloroethane was detected in March, in the treated water (0.20 µg/L) and the Site 2 water (0.36 µg/L). The Maximum Concentration Level set by the United States Environmental Protection Agency for 1,1,1,-Trichloroethane in drinking water is 200 µg/L. 1,1,1-Trichloroethane was also detected at trace levels, once in the raw water and once in the Site 1 water.

THMs are known to be produced during the water treatment process and will always occur in chlorinated surface waters. THMs are comprised mainly of Chloroform, Chlorodibromomethane and Dichlorobromomethane. Bromoform occurs occasionally. Results are reported for the individual compounds as well as for total THMs.

Chloroform, Chlorodibromomethane, Dichlorobromomethane and Total THMs were detected in all treated waters. Bromoform was detected once at a trace level. All Total THM occurrences, ranging from 31.9 µg/L to 66.2 µg/L were well below the ODWO of 350 µg/L.

CONCLUSIONS

The Thunder Bay (Bare Point) Water Treatment Plant for the sample year of 1989 produced good quality water at the plant and this was maintained in the distribution system.

No health related guidelines, for organic or inorganic parameters, were exceeded during 1989.

TABLE 2

DRINKING WATER SURVEILLANCE PROGRAM ANNUAL REPORT

GENERAL INFORMATION

THUNDER BAY (BARE POINT) WATER TREATMENT PLANT

LOCATION:	500 DONALD STREET EAST THUNDER BAY, ONTARIO P7E 5V3 (807-475-1305)
SOURCE:	RAW WATER SOURCE - LAKE SUPERIOR
RATED CAPACITY:	70.46 (1000 M^3/DAY)
OPERATION:	MUNICIPAL
PLANT SUPERINTENDENT:	D. SHANTZ
MINISTRY REGION:	NORTHWEST
DISTRICT OFFICER:	D. MURRAY

MUNICIPALITY SERVED	POPULATION
THUNDER BAY	113,000

TABLE 3

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) SAMPLE DAY CONDITIONS F 1989

	SAMPLE DAY CONDITIONS		TREATMENT CHEMICAL DOSAGES (MG/L)			
			PRE-CHLORINATION	COAGULATION	COAGULATION AID	POST-CHLORINATION
			CHLORINE	ALUM LIQUID	POLYELECTROLYTE	CHLORINE
DATE	RETENTION TIME(HRS)	FLOW (1000M3)				
JAN 10	.5	32.5	1.67	5.03	.18	.42
FEB 14	1.0	37.0	1.26	5.52	.19	.42
MAR 14	.2	.	1.42	4.72	.19	.42
MAY 08	.	.	1.42	6.23	.16	.47
JUN 12	.	.	1.31	8.44	.19	.44
JUL 11	.	.	1.50	6.84	.21	.51
AUG 15	.2	.	1.67	6.21	.20	.57
SEP 12	.	46.0	1.37	7.19	.21	2.03
OCT 11	.2	.	1.47	7.02	.18	.50
NOV 14	.	.	1.27	5.78	.20	.42
DEC 12	1.0	38.0	1.25	5.20	.20	.25

TABLE 4

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT)

SUMMARY TABLE OF RESULTS (1989)

SCAN	PARAMETER	RAW			TREATED			SITE 1			SITE 3			SITE 2			SITE 4		
		TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE
BACTERIOLOGICAL	FECAL COLIFORM MF	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	FECAL COLIFORM	.	.	.	1	0	0	1	0	0	.	.	.	1	0	0	.	.	.
	STANDRD PLATE CNT MF	.	.	.	2	0	0	1	0	0	1	0	0	1	0	0	1	0	0
	COLIFORM	2	1	0	2	0	0	1	0	0	.	.	.	1	0	0	.	.	.
	TOTAL COLIFORM MF	1	1	0	1	0	0	.	.	.	1	0	0	1	0	0	1	0	0
	T COLIFORM BCKGRD MF																		
*TOTAL SCAN BACTERIOLOGICAL		5	2	0	7	0	0	4	0	0	3	0	0	4	0	0	3	0	0
*TOTAL GROUP BACTERIOLOGICAL		5	2	0	7	0	0	4	0	0	3	0	0	4	0	0	3	0	0
CHEMISTRY (FLD)	FLD CHLORINE (COMB)	1	0	0	10	10	0	7	7	0	6	6	0	4	4	0	7	7	0
	FLD CHLORINE FREE	1	0	0	10	10	0	8	8	0	6	6	0	4	4	0	7	7	0
	FLD CHLORINE (TOTAL)	1	0	0	10	10	0	7	7	0	6	6	0	4	4	0	7	7	0
	FLD PH	11	11	0	10	10	0	8	8	0	6	6	0	4	4	0	7	7	0
	FLD TEMPERATURE	11	11	0	10	10	0	8	8	0	6	6	0	4	4	0	7	7	0
	FLD TURBIDITY	10	10	0	10	10	0	.	.	.	.	.	.	.	.	.	6	6	0
*TOTAL SCAN CHEMISTRY (FLD)		35	32	0	60	60	0	38	38	0	30	30	0	20	20	0	34	34	0
CHEMISTRY (LAB)	ALKALINITY	11	11	0	11	11	0	8	8	0	9	9	0	4	4	0	9	9	0
	CALCIUM	11	11	0	11	11	0	8	8	0	9	9	0	4	4	0	10	10	0
	CYANIDE	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	5	0	0
	CHLORIDE	11	11	0	11	11	0	8	8	0	9	9	0	4	4	0	10	10	0

TABLE 4

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT)

SUMMARY TABLE OF RESULTS (1989)

SCAN	PARAMETER	SITE RAW TOTAL	RAW POSITIVE	RAW TRACE	TREATED TOTAL	TREATED POSITIVE	TREATED TRACE	SITE 1 TOTAL	SITE 1 POSITIVE	SITE 1 TRACE	SITE 3 TOTAL	SITE 3 POSITIVE	SITE 3 TRACE	SITE 2 TOTAL	SITE 2 POSITIVE	SITE 2 TRACE	SITE 4 TOTAL	SITE 4 POSITIVE	SITE 4 TRACE
CHEMISTRY (LAB)	COLOUR	11	10	1	11	0	10	8	0	6	9	0	9	4	2	1	9	1	8
	CONDUCTIVITY	11	11	0	11	11	0	8	8	0	9	9	0	4	4	0	9	9	0
	FLUORIDE	11	1	10	11	1	10	8	0	8	9	3	6	4	0	4	9	0	8
	HARDNESS	11	11	0	11	11	0	8	8	0	9	9	0	4	4	0	10	10	0
	IONCAL	11	11	0	11	11	0	8	8	0	10	9	0	4	4	0	10	9	0
	LANGELIERS INDEX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	MAGNESIUM	11	11	0	11	11	0	8	8	0	9	9	0	4	4	0	10	10	0
	SODIUM	11	11	0	11	11	0	8	7	1	9	9	0	4	3	1	10	10	0
	AMMONIUM TOTAL	11	7	2	11	4	1	8	5	2	9	0	5	4	4	0	10	1	5
	NITRITE	11	5	6	11	1	4	8	2	5	9	0	7	4	2	2	10	2	5
	TOTAL NITRATES	11	11	0	11	11	0	8	8	0	9	9	0	4	4	0	10	10	0
	NITROGEN TOT KJELD	11	10	1	11	1	10	8	2	6	9	2	7	4	2	2	10	7	3
	PH	11	11	0	11	11	0	8	8	0	9	9	0	4	4	0	9	9	0
	PHOSPHORUS FIL REACT	11	0	2	11	0	1	.	.	.	.	.	.	.	.	.	.	.	.
	PHOSPHORUS TOTAL	11	0	9	11	0	3	.	.	.	.	.	.	.	.	.	.	.	.
	SULPHATE	11	11	0	11	11	0	8	8	0	9	9	0	4	4	0	9	9	0
	TURBIDITY	11	10	1	11	10	1	8	6	2	9	4	5	4	3	1	9	8	1
*TOTAL SCAN CHEMISTRY (LAB)		220	164	32	220	138	40	140	102	30	159	108	39	70	56	11	168	124	30
METALS	SILVER	11	0	1	11	0	4	8	0	6	9	0	2	4	0	4	9	0	3
	ALUMINUM	11	11	0	11	11	0	8	8	0	9	9	0	4	4	0	9	9	0
	ARSENIC	11	4	7	11	0	10	8	0	8	9	0	9	4	0	4	9	0	7
	BARIUM	11	11	0	11	11	0	8	8	0	9	9	0	4	4	0	9	9	0

TABLE 4

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT)

SUMMARY TABLE OF RESULTS (1989)

SCAN	PARAMETER	SITE RAW TOTAL	RAW POSITIVE	RAW TRACE	TREATED TOTAL	TREATED POSITIVE	TREATED TRACE	SITE 1 TOTAL	SITE 1 POSITIVE	SITE 1 TRACE	SITE 3 TOTAL	SITE 3 POSITIVE	SITE 3 TRACE	SITE 2 TOTAL	SITE 2 POSITIVE	SITE 2 TRACE	SITE 4 TOTAL	SITE 4 POSITIVE	SITE 4 TRACE
METALS	BORON	11	2	9	11	3	8	8	4	4	9	1	8	4	1	3	9	1	8
	BERYLLIUM	11	0	4	11	0	6	8	0	2	9	0	4	4	0	2	9	0	1
	CADMIUM	11	0	3	11	0	3	8	0	4	9	0	1	4	0	1	9	0	3
	COBALT	11	0	11	11	0	11	8	0	8	9	0	9	4	0	4	9	0	9
	CHROMIUM	11	8	2	11	9	0	8	6	2	9	6	2	4	1	1	9	4	2
	COPPER	11	10	1	11	2	9	8	8	0	9	9	0	4	4	0	9	9	0
	IRON	11	0	11	11	0	3	8	0	7	9	0	0	4	0	3	9	3	6
	MERCURY	11	3	7	11	4	6	4	0	0	5	3	0	2	2	0	5	2	2
	MANGANESE	11	11	0	11	8	3	8	6	2	9	1	8	4	4	0	9	9	0
	MOLYBDENUM	11	0	11	11	0	11	8	0	8	9	0	9	4	0	4	9	0	9
	NICKEL	11	0	4	11	0	4	8	0	6	9	0	4	4	1	2	9	0	4
	LEAD	11	1	6	11	1	6	8	8	0	9	9	0	4	3	1	9	9	0
	ANTIMONY	11	10	1	11	10	1	8	8	0	9	8	1	4	4	0	9	9	0
	SELENIUM	11	0	2	11	0	1	8	0	3	9	0	2	4	0	1	9	0	2
	STRONTIUM	11	11	0	11	11	0	8	8	0	9	9	0	4	4	0	9	9	0
	TITANIUM	11	9	2	11	9	2	8	8	0	9	6	3	4	4	0	9	7	2
	THALLIUM	11	0	4	11	0	3	8	0	5	9	[illegible]	2	4	0	1	9	0	0
	URANIUM	11	0	10	11	0	5	8	0	4	9	0	2	4	0	4	9	0	3
	VANADIUM	11	0	11	11	7	4	8	2	6	9	4	5	4	1	3	9	2	7
	ZINC	11	11	0	11	3	8	8	7	1	9	9	0	4	4	0	9	9	0
*TOTAL SCAN METALS		264	102	107	264	89	108	188	81	76	212	83	71	94	41	38	212	91	68
*TOTAL GROUP INORGANIC & PHYSICAL		519	298	139	544	287	148	366	221	106	401	221	110	184	117	49	414	249	98
CHLOROAROMATICS	HEXACHLOROBUTADIENE	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0

TABLE 4

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT)

SUMMARY TABLE OF RESULTS (1989)

SCAN	PARAMETER	SITE RAW TOTAL	RAW POSITIVE	RAW TRACE	TREATED TOTAL	TREATED POSITIVE	TREATED TRACE	SITE 1 TOTAL	SITE 1 POSITIVE	SITE 1 TRACE	SITE 3 TOTAL	SITE 3 POSITIVE	SITE 3 TRACE	SITE 2 TOTAL	SITE 2 POSITIVE	SITE 2 TRACE	SITE 4 TOTAL	SITE 4 POSITIVE	SITE 4 TRACE
CHLOROAROMATICS	123 TRICHLOROBENZENE	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	1234 T-CHLOROBENZENE	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	1235 T-CHLOROBENZENE	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	124 TRICHLOROBENZENE	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	1245 T-CHLOROBENZENE	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	135 TRICHLOROBENZENE	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	HCB	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	HEXACHLOROETHANE	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	OCTACHLOROSTYRENE	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	PENTACHLOROBENZENE	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	236 TRICHLOROTOLUENE	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	245 TRICHLOROTOLUENE	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	26A TRICHLOROTOLUENE	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
*TOTAL SCAN CHLOROAROMATICS		154	0	0	154	0	0	56	0	0	70	0	0	28	0	0	56	0	0
CHLOROPHENOLS	234 TRICHLOROPHENOL	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	2345 T-CHLOROPHENOL	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	2356 T-CHLOROPHENOL	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	245-TRICHLOROPHENOL	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	246-TRICHLOROPHENOL	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	PENTACHLOROPHENOL	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
*TOTAL SCAN CHLOROPHENOLS		12	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE 4

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT)

SUMMARY TABLE OF RESULTS (1989)

SCAN	PARAMETER	SITE RAW TOTAL	RAW POSITIVE	RAW TRACE	TREATED TOTAL	TREATED POSITIVE	TREATED TRACE	SITE 1 TOTAL	SITE 1 POSITIVE	SITE 1 TRACE	SITE 3 TOTAL	SITE 3 POSITIVE	SITE 3 TRACE	SITE 2 TOTAL	SITE 2 POSITIVE	SITE 2 TRACE	SITE 4 TOTAL	SITE 4 POSITIVE	SITE 4 TRACE
PAH	PHENANTHRENE	11	0	0	11	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	ANTHRACENE	10	0	0	10	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	FLUORANTHENE	11	0	0	11	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	PYRENE	11	0	0	11	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	BENZO(A)ANTHRACENE	11	0	0	11	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	CHRYSENE	11	0	0	11	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	DIMETH. BENZ(A)ANTHR	5	0	0	5	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	BENZO(E) PYRENE	11	0	0	11	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	BENZO(B) FLUORANTHEN	11	0	0	11	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	PERYLENE	11	0	0	11	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	BENZO(K) FLUORANTHEN	11	0	0	11	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	BENZO(A) PYRENE	7	0	0	7	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	BENZO(G,H,I) PERYLEN	11	0	0	11	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	DIBENZO(A,H) ANTHRAC	11	0	0	11	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	INDENO(1,2,3-C,D) PY	11	0	0	11	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	BENZO(B) CHRYSENE	11	0	0	11	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	CORONENE	11	0	0	11	0	0	.	.	.	.	.	.	.	.	.	.	.	.
*TOTAL SCAN PAH		176	0	0	176	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PESTICIDES & PCB	ALDRIN	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	ALPHA BHC	11	0	10	11	0	6	4	0	3	5	0	3	2	0	2	4	0	3
	BETA BHC	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	LINDANE	11	0	1	11	0	1	4	0	0	5	0	0	2	0	1	4	0	0

TABLE 4

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT)

SUMMARY TABLE OF RESULTS (1989)

SCAN	PARAMETER	SITE RAW			TREATED			SITE 1			SITE 3			SITE 2			SITE 4		
		TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE
PESTICIDES & PCB	ALPHA CHLORDANE	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	GAMMA CHLORDANE	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	DIELDRIN	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	METHOXYCHLOR	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	ENDOSULFAN I	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	ENDOSULFAN II	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	ENDRIN	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	ENDOSULFAN SULPHATE	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	HEPTACHLOR EPOXIDE	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	HEPTACHLOR	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	MIREX	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	OXYCHLORDANE	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	OPDDT	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	PCB	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	DDD	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	PPDDE	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	PPDDT	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	AMETRINE	11	0	0	11	0	0	4	0	0	0	0	0	2	0	0	1	0	0
	ATRAZINE	11	0	0	11	0	0	4	0	0	0	0	0	2	0	0	1	0	0
	ATRATONE	11	0	0	11	0	0	4	0	0	0	0	0	2	0	0	1	0	0
	CYANAZINE (BLADEX)	11	0	0	11	0	0	4	0	0	0	0	0	2	0	0	1	0	0
	D-ETHYL ATRAZINE	11	0	0	11	0	0	4	0	0	0	0	0	2	0	0	1	0	0
	D-ETHYL SIMAZINE	11	0	0	11	0	0	4	0	0	0	0	0	2	0	0	1	0	0
	PROMETONE	11	0	0	11	0	0	4	0	0	0	0	0	2	0	0	1	0	0
	PROPAZINE	11	0	0	11	0	0	4	0	0	0	0	0	2	0	0	1	0	0

TABLE 4

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT)

SUMMARY TABLE OF RESULTS (1989)

SCAN	PARAMETER	SITE RAW TOTAL	RAW POSITIVE	RAW TRACE	TREATED TOTAL	TREATED POSITIVE	TREATED TRACE	SITE 1 TOTAL	SITE 1 POSITIVE	SITE 1 TRACE	SITE 3 TOTAL	SITE 3 POSITIVE	SITE 3 TRACE	SITE 2 TOTAL	SITE 2 POSITIVE	SITE 2 TRACE	SITE 4 TOTAL	SITE 4 POSITIVE	SITE 4 TRACE
PESTICIDES & PCB	PROMETRYNE	11	0	0	11	0	0	4	0	0	0	0	0	2	0	0	1	0	0
	METRIBUZIN (SENCOR)	11	0	0	11	0	0	4	0	0	0	0	0	2	0	0	1	0	0
	SIMAZINE	11	0	0	11	0	0	4	0	0	0	0	0	2	0	0	1	0	0
	ALACHLOR (LASSO)	11	0	0	11	0	0	4	0	0	0	0	0	2	0	0	1	0	0
	METOLACHLOR	11	0	0	11	0	0	4	0	0	0	0	0	2	0	0	1	0	0
*TOTAL SCAN PESTICIDES & PCB		374	0	11	374	0	7	136	0	3	105	0	3	68	0	3	97	0	3
PHENOLICS	PHENOLICS	11	5	6	11	6	4	.	.	.	.	.	.	.	.	.	.	.	.
*TOTAL SCAN PHENOLICS		11	5	6	11	6	4	0	0	0	0	0	0	0	0	0	0	0	0
SPECIFIC PESTICIDES	TOXAPHENE	11	0	0	11	0	0	4	0	0	5	0	0	2	0	0	4	0	0
	2,4,5-T	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	2,4-D	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	2,4-DB	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	2,4 D PROPIONIC ACID	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	DICAMBA	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	PICHLORAM	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	SILVEX	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	DIAZINON	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	DICHLOROVOS	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	CHLORPYRIFOS	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.

TABLE 4

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT)

SUMMARY TABLE OF RESULTS (1989)

SCAN	PARAMETER	SITE RAW TOTAL	RAW POSITIVE	RAW TRACE	TREATED TOTAL	TREATED POSITIVE	TREATED TRACE	SITE 1 TOTAL	SITE 1 POSITIVE	SITE 1 TRACE	SITE 3 TOTAL	SITE 3 POSITIVE	SITE 3 TRACE	SITE 2 TOTAL	SITE 2 POSITIVE	SITE 2 TRACE	SITE 4 TOTAL	SITE 4 POSITIVE	SITE 4 TRACE
SPECIFIC PESTICIDES	ETHION	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	AZINPHOS-METHYL	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	MALATHION	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	MEVINPHOS	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	METHYL PARATHION	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	METHYLTRITHION	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	PARATHION	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	PHORATE	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	RELDAN	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	RONNEL	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	AMINOCARB	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	BENOMYL	1	0	0	1	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	BUX	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	CARBOFURAN	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	CICP	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	DIALLATE	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	EPTAM	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	IPC	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	PROPOXUR	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	CARBARYL	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
	BUTYLATE	2	0	0	2	0	0	.	.	.	.	.	.	.	.	.	.	.	.
*TOTAL SCAN SPECIFIC PESTICIDES		64	0	0	64	0	0	4	0	0	5	0	0	2	0	0	4	0	0
VOLATILES	BENZENE	9	0	0	9	0	1	3	0	0	4	0	0	1	0	0	5	0	0

TABLE 4

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT)

SUMMARY TABLE OF RESULTS (1989)

SCAN	PARAMETER	SITE RAW TOTAL	RAW POSITIVE	RAW TRACE	TREATED TOTAL	TREATED POSITIVE	TREATED TRACE	SITE 1 TOTAL	SITE 1 POSITIVE	SITE 1 TRACE	SITE 3 TOTAL	SITE 3 POSITIVE	SITE 3 TRACE	SITE 2 TOTAL	SITE 2 POSITIVE	SITE 2 TRACE	SITE 4 TOTAL	SITE 4 POSITIVE	SITE 4 TRACE
VOLATILES	TOLUENE	9	0	2	9	0	0	3	0	0	4	0	1	1	0	0	5	0	0
	ETHYLBENZENE	9	0	1	9	0	0	3	0	0	4	0	0	1	0	0	5	0	0
	P-XYLENE	9	0	0	9	0	0	3	0	0	4	0	0	1	0	0	5	0	0
	M-XYLENE	9	0	0	9	0	0	3	0	0	4	0	0	1	0	0	5	0	0
	O-XYLENE	9	0	0	9	0	0	3	0	0	4	0	0	1	0	0	5	0	0
	STYRENE	9	0	7	9	0	2	3	0	0	4	0	2	1	0	0	5	0	0
	1,1 DICHLOROETHYLENE	9	0	0	9	0	0	3	0	0	4	0	1	1	0	0	5	0	1
	METHYLENE CHLORIDE	9	0	0	9	0	0	3	0	0	4	0	0	1	0	0	5	0	0
	T1,2DICHLOROETHYLENE	9	0	0	9	0	0	3	0	0	4	0	0	1	0	0	5	0	0
	1,1 DICHLOROETHANE	9	0	0	9	0	0	3	0	0	4	0	0	1	0	0	5	0	0
	CHLOROFORM	9	1	5	9	9	0	3	3	0	4	4	0	1	1	0	5	5	0
	111, TRICHLOROETHANE	9	0	1	9	1	0	3	0	1	4	0	0	1	1	0	5	0	0
	1,2 DICHLOROETHANE	9	0	0	9	0	0	3	0	0	4	0	0	1	0	0	5	0	0
	CARBON TETRACHLORIDE	9	0	0	9	0	0	3	0	0	4	0	0	1	0	0	5	0	0
	1,2 DICHLOROPROPANE	9	0	0	9	0	0	3	0	0	4	0	0	1	0	0	5	0	0
	TRICHLOROETHYLENE	9	0	0	9	0	0	3	0	0	4	0	0	1	0	0	5	0	0
	DICHLOROBROMOMETHANE	9	0	0	9	9	0	3	3	0	4	4	0	1	1	0	5	5	0
	112 TRICHLOROETHANE	9	0	0	9	0	0	3	0	0	4	0	0	1	0	0	5	0	0
	CHLORODIBROMOMETHANE	9	0	0	9	1	8	3	0	3	4	0	4	1	0	1	5	0	4
	T-CHLOROETHYLENE	9	0	0	9	0	0	3	0	0	4	0	0	1	0	0	5	0	0
	BROMOFORM	9	0	0	9	0	1	3	0	0	4	0	0	1	0	0	5	0	0
	1122 T-CHLOROETHANE	9	0	0	9	0	0	3	0	0	4	0	0	1	0	0	5	0	0
	CHLOROBENZENE	9	0	0	9	0	0	3	0	0	4	0	0	1	0	0	5	0	0
	1,4 DICHLOROBENZENE	9	0	0	9	0	0	3	0	0	4	0	0	1	0	0	5	0	0
	1,3 DICHLOROBENZENE	9	0	0	9	0	0	3	0	0	4	0	0	1	0	0	5	0	0

TABLE 4

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT)

SUMMARY TABLE OF RESULTS (1989)

		SITE																	
		RAW			TREATED			SITE 1			SITE 3			SITE 2			SITE 4		
SCAN	PARAMETER	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE
VOLATILES	1,2 DICHLOROBENZENE	9	0	0	9	0	0	3	0	0	4	0	0	1	0	0	5	0	0
	ETHLYENE DIBROMIDE	9	0	0	9	0	0	3	0	0	4	0	0	1	0	0	5	0	0
	TOTL TRIHALOMETHANES	9	0	2	9	9	0	3	3	0	4	4	0	1	1	0	5	5	0
*TOTAL SCAN VOLATILES		261	1	18	261	29	12	87	9	4	116	12	8	29	4	1	145	15	5
*TOTAL GROUP ORGANIC		1052	6	35	1052	35	23	283	9	7	296	12	11	127	4	4	302	15	8
TOTAL		1576	306	174	1603	322	171	653	230	113	700	233	121	315	121	53	719	264	106

KEY TO TABLE 5 and 6

A ONTARIO DRINKING WATER OBJECTIVES (ODWO)
1. Maximum Acceptable Concentration (MAC)
1+. MAC for Total Trihalomethanes
1*. MAC for Bacteriological Analyses
Poor water quality is indicated when :
- total coliform counts > 0 < 5
- P/A Bottle Test is present after 48 hours
- Aeromonas organisms are detected in more than 25% of samples in a single submission or in successive submissions from the same sampling site
- Pseudomonas Aeruginosa, Staphylococcus Aureus and members of the Fecal Streptococcus group should not be detected in any sample
- Standard Plate Count should not exceed 500 organisms per ml at 35 ^{0}C within 48 hours

2. Interim Maximum Acceptable Concentration (IMAC)
3. Maximum Desirable Concentration (MDC)
4. Aesthetic or Recommended Operational Guideline
- hardness levels between 80 and 100 mg/L as calcium carbonate are considered to provide an acceptable balance between corrosion and incrustation, water supplies with a hardness >200 mg/L are considered poor and those in excess of 500 mg/L are unacceptable.

B HEALTH & WELFARE CANADA (H&W)
1. Maximum Acceptable Concentration (MAC)
2. Proposed MAC
3. Interim MAC
4. Aesthetic Objective (AO) (for xylenes, a total)

C WORLD HEALTH ORGANIZATION (WHO)
1. Guideline Value (GV)
2. Tentative GV
3. Aesthetic GV

D US ENVIRONMENTAL PROTECTION AGENCY (EPA)
1. Maximum Contaminant Level (MCL)
2. Suggested No-Adverse Effect Level (SNAEL)
3. Lifetime Health Advisory
4. EPA Ambient Water Quality Criteria
5. Maximum Contaminant Level Goal (MCLG)

F EUROPEAN ECONOMIC COMMUNITY (EEC)
1. Health Related Guideline Level
2. Aesthetic Guideline Level
3. Maximum Admissable Concentration (MADC)

G CALIFORNIA STATE DEPARTMENT OF HEALTH-GUIDELINE VALUE

H USSR MAXIMUM PERMISSIBLE CONCENTRATION

I NEW YORK STATE AMBIENT WATER GUIDELINE

N/A NONE AVAILABLE

INTERPRETATION OF DATA

The interpretation of analytical results that are obtained from measurements near the limit of detection of the measurement process is subject to greater uncertainty than those at higher concentrations. The principle areas of concern relate to whether the substance has actually been detected, whether it has been properly identified, and whether it is an artifact of the measurement process. In other words, false positives can be caused by the instrumentation or the test procedures used, when in fact these compounds are not present in the sample.

There are several methods to treat data from such measurements:
1. Exclude the low-level data because of this uncertainty factor. However, studies of long-term environmental trends and modelling may be adversely affected by exclusion of such data.
2. Qualify these data so the user is aware of the greater uncertainty associated with their use.

For the Drinking Water Surveillance Program, measurements near the limit of detection of the measurement process are reported qualified by the code "<T". Results quantified by "W" indicate a zero measurement. These results are reported for purposes of modelling and long-term trend analysis and no significance should be attributed to a single determination of a substance below "T" (a single determination may well be a false positive). Repeat analysis or additional data are needed before it can be stated with certainty that the substance in question was truly present. On the other hand, it is less likely that repeated detection of a substance at or near the limit of detection at a specific location is solely due to an artifact in the measurement system, and more likely represents a true positive. However the average of such data is still only an estimate of the amount of substance present subject to the possible biases of the method used.

LABORATORY RESULTS, REMARK DESCRIPTIONS

.	No Sample Taken
BDL	Below Minimum Measurable Amount
<T	Greater Than Detection Limit But Not Confident (SEE INTERPRETATION OF RESULTS ABOVE)
>	Results Are Greater Than The Upper Limit
<=>	Approximate Result
!AW	No Data: Analysis Withdrawn
!CR	No Data: Could Not Confirm By Reanalysis
!CS	No Data: Contamination Suspected
!IL	No Data: Sample Incorrectly Labelled
!IP	No Data: Insufficient Preservative
!IS	No Data: Insufficient Sample

!LA	No Data: Laboratory Accident
!LD	No Data: Test Queued After Sample Discarded
!NA	No Data: No Authorization To Perform Reanalysis
!NP	No Data: No Procedure
!NR	No Data: Sample Not Received
!OP	No Data: Obscured Plate
!QU	No Data: Quality Control Unacceptable
!PE	No Data: Procedural Error - Sample Discarded
!PH	No Data: Sample pH Outside Valid Range
!RE	No Data: Received Empty
!RO	No Data: See Attached Report (no numeric results)
!SM	No Data: Sample Missing
!SS	No Data: Send Separate Sample Properly Preserved
!UI	No Data: Indeterminant Interference
!TX	No Data: Time Expired
A3C	Approximate, Total Count Exceeded 300 Colonies
APL	Additional Peak, Large, Not Priority Pollutant
APS	Additional Peak, Less Than, Not Priority Pollutant
CIC	Possible Contamination, Improper Cap
CRO	Calculated Result Only
PPS	Test Performed On Preserved Sample
RMP	P and M-Xylene Not Separated
RRV	Rerun Verification
RVU	Reported Value Unusual
SPS	Several Peaks, Small, Not Priority Pollutant
UCR	Unreliable: Could Not Confirm By Reanalysis
UCS	Unreliable: Contamination Suspected
UIN	Unreliable: Indeterminant Interference
XP	Positive After X Number of Hours
T# (T06)	Result Taken After # Hours

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
BACTERIOLOGICAL										
FECAL COLIFORM ( )			DET'N LIMIT = N/A		GUIDELINE = 0 (A1)					
MAR	.	0	.	0	.	.	.	0	.	.
STANDRD PLATE CNT MF ( )			DET'N LIMIT = 0		GUIDELINE = 500/ML (A1)					
MAR	.	0	.	0	.	.	.	0	.	.
JUL	.	0 <=>	.	.	.	.	.	.	.	8 <
DEC	.	.	.	.	.	1 <=>	.	.	.	.
COLIFORM ( )			DET'N LIMIT = N/A		GUIDELINE = 0 (A1)					
MAR	.	0	.	0	.	.	.	0	.	.
TOTAL COLIFORM MF (CT/100ML)			DET'N LIMIT = 0		GUIDELINE = 5/100ML(A1)					
MAR	BDL	0	.	0	.	.	.	0	.	.
JUL	76 A3C	0	.	.	.	.	.	.	.	0
DEC	.	.	.	.	.	0	.	.	.	.
T COLIFORM BCKGRD MF (CT/100ML)			DET'N LIMIT = 0		GUIDELINE = N/A					
JUL	6000 A3C	0	.	.	.	.	.	.	.	0
DEC	.	.	.	.	.	0	.	.	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

SITE TYPE	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
CHEMISTRY (FLD)										
FLD CHLORINE (COMB) ( )			DET'N LIMIT = N/A		GUIDELINE = N/A					
JAN	.	.070	.200	.100	.	.	.100	.100	.	.
FEB	.	.070	.200	.500	.	.	.	.	.	.
MAR	.	.100	.100	.200	.	.	.100	.200	.	.
MAY	.	.070	.	.100	.	.	.	.	.	.
JUN	.	.200	.	.	.	.	.	.	.	.
JUL	.	.070	.	.	.	.	.	.	.200	.200
AUG	.	.070	.	.	.200	.	.	.	.250	.
SEP	.000	.	.	.	.150	.150	.	.	.200	.200
OCT	.	.080	.	.	1.100	.	.	.	.200	.
NOV	.	.080	.	.	1.100	.	.	.	.200	.
DEC	.	.070	.	.	.250	.	.	.	.	.
FLD CHLORINE FREE ( )			DET'N LIMIT = N/A		GUIDELINE = N/A					
JAN	.	1.340	.500	1.100	.	.	1.000	1.200	.	.
FEB	.	1.350	1.300	.500	.	.	.	.	.	.
MAR	.	1.400	.500	1.100	.	.	1.100	1.300	.	.
MAY	.	1.240	.100	1.100	.	.	.	.	.	.
JUN	.	1.300	.	.	.	.	.	.	.	.
JUL	.	1.190	.	.	.	.	.	.	.900	.900
AUG	.	1.330	.	.	.900	.	.	.	.950	.
SEP	.000	.	.	.	1.100	1.100	.	.	.900	.900
OCT	.	1.500	.	.	.900	.	.	.	1.100	.
NOV	.	1.000	.	.	.900	.	.	.	.900	.
DEC	.	1.000	.	.	.750	.	.	.	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

SITE TYPE	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
FLD CHLORINE (TOTAL) ( )			DET'N LIMIT = N/A		GUIDELINE = N/A					
JAN	.	1.410	.700	1.200	.	.	1.100	1.300	.	.
FEB	.	1.370	1.100	.	.	.	.	.	.	.
MAR	.	1.500	.600	1.300	.	.	1.100	1.500	.	.
MAY	.	1.310	.100	1.300	.	.	.	.	.	.
JUN	.	1.500	.	.	.	.	.	.	.	.
JUL	.	1.260	.	.	.	.	.	.	1.100	1.100
AUG	.	1.400	.	.	1.100	.	.	.	1.200	.
SEP	.000	.	.	.	1.250	1.250	.	.	1.100	1.100
OCT	.	1.500	.	.	.200	.	.	.	1.300	.
NOV	.	1.080	.	.	2.000	.	.	.	1.100	.
DEC	.	1.070	.	.	1.000	.	.	.	.	.
FLD PH (DIMNSLESS)			DET'N LIMIT = N/A		GUIDELINE = 6.5-8.5(A4)					
JAN	7.500	7.700	7.200	7.600	.	.	7.200	7.400	.	.
FEB	7.300	7.100	7.400	7.400	.	.	.	.	.	.
MAR	7.400	7.800	7.400	7.600	.	.	7.400	7.200	.	.
MAY	7.400	7.200	7.300	7.400	.	.	.	.	.	.
JUN	7.700	7.100	.	.	.	.	.	.	.	.
JUL	7.600	7.200	.	.	.	.	.	.	7.200	7.200
AUG	7.400	7.500	.	.	7.500	.	.	.	7.500	.
SEP	7.500	.	.	.	7.300	7.300	.	.	7.200	7.200
OCT	7.300	7.500	.	.	7.400	.	.	.	6.900	.
NOV	7.300	7.500	.	.	7.500	.	.	.	7.000	.
DEC	7.500	7.200	.	.	7.400	.	.	.	.	.
FLD TEMPERATURE (DEG.C)			DET'N LIMIT = N/A		GUIDELINE = 15 (A1)					

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

		WATER TREATMENT PLANT		DISTRIBUTION SYSTEM					
SITE TYPE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
JAN	1.000	2.000	11.500	3.300	.	.	10.000	6.000	.	.
FEB	2.000	2.000	12.000	2.000	.	.	.	.	.	.
MAR	2.000	2.000	12.000	2.000	.	.	8.000	4.000	.	.
MAY	4.500	4.500	12.000	3.000	.	.	.	.	.	.
JUN	8.000	8.000	.	.	.	.	.	.	.	.
JUL	12.000	12.000	.	.	.	.	.	.	12.000	12.000
AUG	10.000	10.000	.	.	12.000	.	.	.	12.000	.
SEP	10.000	.	.	.	12.000	12.000	.	.	14.000	14.000
OCT	9.000	9.000	.	.	11.000	.	.	.	.	.
NOV	7.000	7.000	.	.	9.000	.	.	.	7.000	.
DEC	4.000	4.000	.	.	6.000	.	.	.	.	.
FLD TURBIDITY (FTU)			DET'N LIMIT = N/A		GUIDELINE = 1.0 (A1)					
JAN	.470	.090	.	.	.	.	.	.	.	.
FEB	.550	.090	.	.	.	.	.	.	.	.
MAR	.350	.120	.	.	.	.	.	.	.	.
MAY	.420	.080	.	.	.	.	.	.	.	.
JUN	.770	.080	.	.	.	.	.	.	.	.
JUL	.550	.100	.	.	.	.	.	.	.	.
AUG	.	.080	.	.	.	.	.	.	.	.
SEP	.470	.	.	.	.	.	.	.	.	.
OCT	.600	.060	.	.	.	.	.	.	.	.
NOV	.800	.080	.	.	.	.	.	.	.	.
DEC	.600	.090	.	.	.	.	.	.	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
TYPE			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
CHEMISTRY (LAB)										
ALKALINITY (MG/L)			DET'N LIMIT = .200		GUIDELINE = 30-500 (A4)					
JAN	45.900	40.700	42.200	42.300	.	.	40.800	41.700	.	.
FEB	46.200	41.200	42.500	42.100	.	.	.	.	.	.
MAR	45.200	40.300	41.700	41.600	.	.	40.400	41.200	.	.
MAY	44.400	38.500	40.300	40.000	.	.	.	.	.	.
JUN	43.600	37.200	.	.	.	.	.	.	.	.
JUL	45.200	38.700	.	.	.	.	.	.	38.600	38.800
AUG	44.900	38.600	.	.	42.600	41.700	.	.	39.300	39.200
SEP	45.500	39.200	.	.	43.200	42.700	.	.	39.900	39.900
OCT	44.700	39.600	.	.	41.200	40.600	.	.	39.300	39.200
NOV	45.500	39.500	.	.	41.700	41.800	.	.	115	39.600
DEC	45.000	39.200	.	.	.	41.900	.	.	.	.
CALCIUM (MG/L)			DET'N LIMIT = .100		GUIDELINE = 100 (F2)					
JAN	14.200	13.800	14.200	14.400	.	.	14.200	14.000	.	.
FEB	15.200	15.600	16.200	16.000	.	.	.	.	.	.
MAR	14.400	14.600	15.000	15.400	.	.	15.200	15.200	.	.
MAY	14.200	14.000	14.800	14.400	.	.	.	.	.	.
JUN	12.400	11.600	.	.	.	.	.	.	.	.
JUL	14.400	14.600	.	.	.	.	.	.	14.400	14.600
AUG	13.800	14.000	.	.	15.400	15.800	.	.	14.400	15.200
SEP	14.600	14.600	.	.	16.000	15.600	.	.	14.800	14.400
OCT	15.200	15.600	.	.	17.200	16.600	.	.	14.800	15.000
NOV	15.400	14.800	.	.	16.200	17.000	.	.	15.800	15.600
DEC	14.400	14.600	.	.	.	14.800	.	.	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

SITE TYPE	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
CHLORIDE (MG/L)			DET'N LIMIT = .200		GUIDELINE = 250 (A3)					
JAN	1.700	3.100	3.300	3.200	.	.	3.300	3.100	.	.
FEB	1.800	3.100	3.400	3.200	.	.	.	.	.	.
MAR	1.600	3.000	3.300	2.800	.	.	3.100	2.800	.	.
MAY	1.700	3.400	4.000	3.500	.	.	.	.	.	.
JUN	1.300	1.600	.	.	.	.	.	.	.	.
JUL	1.900	3.600	.	.	.	.	.	.	4.000	3.700
AUG	1.700	3.500	.	.	3.800	3.900	.	.	3.800	3.600
SEP	1.700	3.700	.	.	4.000	3.600	.	.	3.700	3.700
OCT	1.600	3.200	.	.	3.600	3.400	.	.	3.400	3.400
NOV	1.600	2.900	.	.	3.000	3.000	.	.	3.100	3.100
DEC	1.700	3.400	.	.	.	3.000	.	.	.	.
COLOUR (HZU)			DET'N LIMIT = .5		GUIDELINE = 5.0 (A3)					
JAN	2.500	.500 <T	BDL	BDL	.	.	4.500	BDL	.	.
FEB	2.500	.500 <T	.500 <T	.500 <T	.	.	.	.	.	.
MAR	.500 <T	1.000 <T	.500 <T	1.000 <T	.	.	.500 <T	12.000	.	.
MAY	3.000	1.000 <T	1.500 <T	1.000 <T	.	.	.	.	.	.
JUN	3.000	.500 <T	.	.	.	.	.	.	.	.
JUL	4.500	1.500 <T	.	.	.	.	.	.	2.000 <T	1.500 <T
AUG	3.000	BDL	.	.	1.000 <T	1.000 <T	.	.	2.000 <T	2.000 <T
SEP	3.000	1.000 <T	.	.	1.000 <T	.500 <T	.	.	2.500	1.500 <T
OCT	3.000	.500 <T	.	.	1.500 <T	1.000 <T	.	.	1.000 <T	1.500 <T
NOV	2.500	.500 <T	.	.	.500 <T	.500 <T	.	.	[illegible]	1.000 <T
DEC	3.000	1.000 <T	.	.	.	.500 <T	.	.	.	.
CONDUCTIVITY (UMHO/CM)			DET'N LIMIT = 1		GUIDELINE = 400 (F2)					

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

SITE TYPE	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
JAN	102	106	108	107	.	.	106	106	.	.
FEB	104	107	110	109	.	.	.	.	.	.
MAR	104	107	109	108	.	.	108	108	.	.
MAY	102	105	109	108	.	.	.	.	.	.
JUN	99	103	.	.	.	.	.	.	.	.
JUL	102	105	.	.	.	.	.	.	106	106
AUG	100	104	.	.	112	111	.	.	107	106
SEP	103	108	.	.	113	111	.	.	107	107
OCT	102	105	.	.	115	113	.	.	105	105
NOV	102	105	.	.	109	109	.	.	115	105
DEC	104	107	.	.	.	108	.	.	.	.
FLUORIDE (MG/L)			DET'N LIMIT = .01		GUIDELINE = 2.400 (A1)					
JAN	.040 <T	.040 <T	.020 <T	.020 <T	.	.	.020 <T	.040 <T	.	.
FEB	.040 <T	.040 <T	.040 <T	.040 <T	.	.	.	.	.	.
MAR	.020 <T	.020 <T	.020 <T	.020 <T	.	.	.040 <T	.020 <T	.	.
MAY	.040 <T	.040 <T	.040 <T	.040 <T	.	.	.	.	.	.
JUN	.040 <T	.020 <T	.	.	.	.	.	.	.	.
JUL	.040 <T	.040 <T	.	.	.	.	.	.	.040 <T	.040 <
AUG	.060	.040 <T	.	.	.060	.060	.	.	.040 <T	.020 <
SEP	.040 <T	.040 <T	.	.	.020 <T	.040 <T	.	.	.020 <T	.020 <
OCT	.040 <T	.020 <T	.	.	.020 <T	.020 <T	.	.	.020 <T	BDL
NOV	.040 <T	.020 <T	.	.	.020 <T	.020 <T	.	.	115	.020 <
DEC	.040 <T	.020	.	.	.	.020	.	.	.	.
HARDNESS (MG/L)			DET'N LIMIT = .500		GUIDELINE = 80-100 (A4)					
JAN	47.000	47.000	47.000	47.000	.	.	47.000	47.000	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

SITE TYPE	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
FEB	51.000	51.000	53.000	53.000	.	.	.	.	.	.
MAR	48.000	49.000	50.000	50.000	.	.	49.000	50.000	.	.
MAY	48.000	48.000	49.000	48.000	.	.	.	.	.	.
JUN	42.000	40.000	.	.	.	.	.	.	.	.
JUL	47.000	48.000	.	.	.	.	.	.	48.000	48.000
AUG	48.000	48.000	.	.	50.000	51.000	.	.	49.000	51.000
SEP	49.000	49.000	.	.	52.000	51.000	.	.	49.000	48.000
OCT	51.000	52.000	.	.	55.000	53.000	.	.	50.000	50.000
NOV	51.000	50.000	.	.	52.000	55.000	.	.	51.000	51.000
DEC	48.000	48.000	.	.	.	48.000	.	.	.	.
IONCAL (DMNSLESS)			DET'N LIMIT = N/A		GUIDELINE = N/A					
JAN	2.935	4.801	6.886	5.650	.	.	4.819	7.525	.	.
FEB	.501	2.552	3.643	2.344	.	.	.	.	.	.
MAR	3.653	2.588	4.046	.127	.	.	2.314	.338	.	.
MAY	.667	.547	1.788	.695	.	.	.	.	.	.
JUN	9.076	9.659	.	.	.	.	.	.	.	.
JUL	.808	2.704	.	.	.	.	.	.	.313	1.755
AUG	1.549	.659	.	.	4.182	1.979	.	.	.941	7.643
SEP	1.431	.350	.	.	2.252	1.864	.	.	.181	1.931
OCT	5.179	5.392	.	.	5.412	2.639	.	.	2.233	4.186
NOV	3.746	1.780	.	.	2.599	4.218	.	.	.000 NAF	1.600
DEC	.863	.208	.	.	.000 NAF	3.632	.	.	.	.
LANGELIERS INDEX (DMNSLESS)			DET'N LIMIT = N/A		GUIDELINE = N/A					
JAN	-.674	-1.011	-.843	-.896	.	.	-.817	-.914	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

SITE TYPE	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
FEB	-.633	-.873	-.714	-.703	.	.	.	.	.	.
MAR	-.656	-.961	-.665	-.694	.	.	-.693	-.854	.	.
MAY	-.549	-.698	-.636	-.641	.	.	.	.	.	.
JUN	-.824	-1.064	.	.	.	.	.	.	.	.
JUL	-.565	-.708	.	.	.	.	.	.	-.696	-.787
AUG	-.775	-1.127	.	.	-.776	-.784	.	.	-.858	-.935
SEP	-.686	-.863	.	.	-.784	-.689	.	.	-.679	-.841
OCT	-.616	-.829	.	.	-.674	-.705	.	.	-.765	-.730
NOV	-.553	-.753	.	.	-.642	-.590	.	.	.	-.669
DEC	-.678	-.843	.	.	.	-.719	.	.	.	.
MAGNESIUM (MG/L)			DET'N LIMIT = .050		GUIDELINE = 30 (F2)					
JAN	2.900	3.000	2.800	2.800	.	.	2.800	2.800	.	.
FEB	3.100	2.900	3.000	3.100	.	.	.	.	.	.
MAR	2.900	2.900	2.900	3.000	.	.	2.700	3.000	.	.
MAY	3.100	3.100	3.000	3.000	.	.	.	.	.	.
JUN	2.800	2.700	.	.	.	.	.	.	.	.
JUL	2.900	2.900	.	.	.	.	.	.	2.900	2.800
AUG	3.300	3.200	.	.	2.800	2.700	.	.	3.100	3.300
SEP	2.900	3.000	.	.	2.800	2.800	.	.	3.000	3.000
OCT	3.100	3.200	.	.	3.000	2.900	.	.	3.000	3.100
NOV	3.100	3.100	.	.	2.800	2.900	.	.	2.900	2.900
DEC	2.900	2.900	.	.	.	2.700	.	.	.	.
SODIUM (MG/L)			DET'N LIMIT = .200		GUIDELINE = 200 (C3)					
JAN	1.800	1.800	1.800	1.800	.	.	1.800	1.600	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

SITE TYPE	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
FEB	1.600	1.600	1.800	1.200	.	.	.	.	.	.
MAR	1.200	1.000	1.000 <T	1.000	.	.	1.000	1.000 <T	.	.
MAY	1.800	1.600	1.600	1.800	.	.	.	.	.	.
JUN	1.200	1.400	.	.	.	.	.	.	.	.
JUL	2.000	2.000	.	.	.	.	.	.	2.000	2.000
AUG	1.800	1.600	.	.	2.000	2.000	.	.	2.600	2.600
SEP	1.600	1.800	.	.	1.600	1.600	.	.	1.600	1.600
OCT	1.800	1.800	.	.	2.000	1.800	.	.	1.800	1.800
NOV	1.600	1.600	.	.	1.600	1.600	.	.	1.600	1.600
DEC	2.200	2.000	.	.	.	1.800	.	.	.	.
AMMONIUM TOTAL (MG/L)			DET'N LIMIT = 0.002		GUIDELINE = .05 (F2)					
JAN	.014	.012	.018	.012	.	.	.042	.012	.	.
FEB	.002	.002	BDL	.002	.	.	.	.	.	.
MAR	.002	.002	.002	.002	.	.	.002	.002	.	.
MAY	.006 <T	BDL	.004 <T	.002 <T	.	.	.	.	.	.
JUN	.016	.010	.	.	.	.	.	.	.	.
JUL	.012	.002 <T	.	.	.	.	.	.	.008 <T	.012
AUG	.010	BDL	.	.	.006 <T	.004 <T	.	.	.008 <T	.008 <
SEP	.010	BDL	.	.	.002 <T	BDL	.	.	BDL	BDL
OCT	.002 <T	BDL	.	.	.004 <T	.002 <T	.	.	.004 <T	BDL
NOV	BDL	BDL	.	.	BDL	BDL	.	.	.002 <T	BDL
DEC	BDL	BDL	.	.	.	BDL	.	.	.	.
NITRITE (MG/L)			DET'N LIMIT = 0.001		GUIDELINE = 1.000 (A1)					
JAN	.002 <T	BDL	.002 <T	BDL	.	.	.002 <T	.001 <T	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

SITE TYPE	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
FEB	.005	.002 <T	.004 <T	.002 <T	.	.	.	.	.	.
MAR	.001	.001	.001	.001	.	.	.001	.001	.	.
MAY	.005	.002 <T	.004 <T	.003 <T	.	.	.	.	.	.
JUN	.007	.004 <T	.	.	.	.	.	.	.	.
JUL	.002 <T	BDL	.	.	.	.	.	.	.001 <T	.001 <
AUG	.002 <T	BDL	.	.	.001 <T	.001 <T	.	.	.006	.006
SEP	.002 <T	BDL	.	.	BDL	BDL	.	.	BDL	BDL
OCT	.002 <T	BDL	.	.	.001 <T	.001 <T	.	.	.001 <T	BDL
NOV	.005	BDL	.	.	.002 <T	.002 <T	.	.	.003 <T	.001 <
DEC	.003 <T	.001 <T	.	.	.	.002 <T	.	.	.	.
TOTAL NITRATES (MG/L)			DET'N LIMIT = .020		GUIDELINE = 10.000 (A1)					
JAN	.315	.310	.310	.305	.	.	.440	.310	.	.
FEB	.320	.320	.325	.325	.	.	.	.	.	.
MAR	.325	.325	.330	.325	.	.	.445	.325	.	.
MAY	.315	.325	.330	.315	.	.	.	.	.	.
JUN	.165	.170	.	.	.	.	.	.	.	.
JUL	.260	.265	.	.	.	.	.	.	.370	.265
AUG	.280	.265	.	.	.235	.240	.	.	.255	.260
SEP	.300	.270	.	.	.305	.295	.	.	.285	.300
OCT	.315	.320	.	.	.315	.305	.	.	.315	.310
NOV	.335	.330	.	.	.325	.300	.	.	.330	.320
DEC	.315	.330	.	.	.	.325	.	.	.	.
NITROGEN TOT KJELD (MG/L)			DET'N LIMIT = .020		GUIDELINE = N/A					
JAN	.150	.070 <T	.090 <T	.070 <T	.	.	.120	.070 <T	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE TYPE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
FEB	.090 <T	.060 <T	.080 <T	.060 <T	.	.	.	.	.	.
MAR	.110	.050 <T	.080 <T	.060 <T	.	.	.110	.060 <T	.	.
MAY	.130	.080 <T	.130	.330	.	.	.	.	.	.
JUN	.100	.050 <T	.	.	.	.	.	.	.	.
JUL	.150	.090 <T	.	.	.	.	.	.	.170	.100
AUG	.140	.080 <T	.	.	.100	.110	.	.	.110	.130
SEP	.130	.080 <T	.	.	.090 <T	.060 <T	.	.	.120	.070 <T
OCT	.110	.070 <T	.	.	.080 <T	.090 <T	.	.	.110	.080 <T
NOV	.110	.060 <T	.	.	.080 <T	.060 <T	.	.	.120	.080 <T
DEC	.190	.110	.	.	.	.080 <T	.	.	.	.
PH (UNITLESS)			DET'N LIMIT = N/A		GUIDELINE = 6.5-8.5(A4)					
JAN	7.870	7.600	7.740	7.680	.	.	7.780	7.680	.	.
FEB	7.880	7.680	7.810	7.830	.	.	.	.	.	.
MAR	7.890	7.630	7.900	7.860	.	.	7.880	7.710	.	.
MAY	8.010	7.930	7.950	7.960	.	.	.	.	.	.
JUN	7.800	7.660	.	.	.	.	.	.	.	.
JUL	7.980	7.900	.	.	.	.	.	.	7.920	7.820
AUG	7.790	7.500	.	.	7.770	7.760	.	.	7.750	7.650
SEP	7.850	7.740	.	.	7.740	7.850	.	.	7.910	7.760
OCT	7.910	7.740	.	.	7.840	7.830	.	.	7.830	7.860
NOV	7.960	7.840	.	.	7.890	7.920	.	.	IIS	7.900
DEC	7.870	7.760	.	.	.	7.850	.	.	.	.
PHOSPHORUS FIL REACT (MG/L)			DET'N LIMIT = .0005		GUIDELINE = N/A					
JAN	.001 <T	.000 <T	.	.	.	.	.	.	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

SITE TYPE	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
FEB	.000	.000	.	.	.	.	.	.	.	.
MAR	.000	.000	.	.	.	.	.	.	.	.
MAY	BDL	BDL	.	.	.	.	.	.	.	.
JUN	BDL	BDL	.	.	.	.	.	.	.	.
JUL	BDL	BDL	.	.	.	.	.	.	.	.
AUG	BDL	BDL	.	.	.	.	.	.	.	.
SEP	BDL	BDL	.	.	.	.	.	.	.	.
OCT	.000	.000	.	.	.	.	.	.	.	.
NOV	BDL	BDL	.	.	.	.	.	.	.	.
DEC	.001 <T	BDL	.	.	.	.	.	.	.	.
PHOSPHORUS TOTAL (MG/L)			DET'N LIMIT = .002		GUIDELINE = .40 (F2)					
JAN	.003 <T	BDL	.	.	.	.	.	.	.	.
FEB	BDL	BDL	.	.	.	.	.	.	.	.
MAR	.002 <T	BDL	.	.	.	.	.	.	.	.
MAY	.003 <T	BDL	.	.	.	.	.	.	.	.
JUN	.006 <T	.002 <T	.	.	.	.	.	.	.	.
JUL	.004 <T	.002 <T	.	.	.	.	.	.	.	.
AUG	.005 <T	BDL	.	.	.	.	.	.	.	.
SEP	.002 <T	BDL	.	.	.	.	.	.	.	.
OCT	.004 <T	BDL	.	.	.	.	.	.	.	.
NOV	BDL	BDL	.	.	.	.	.	.	.	.
DEC	.004 <T	.002 <T	.	.	.	.	.	.	.	.
SULPHATE (MG/L)			DET'N LIMIT = .200		GUIDELINE = 500. (A3)					
JAN	3.280	6.730	6.230	6.170	.	.	6.200	6.310	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

SITE TYPE	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
FEB	3.860	6.040	5.990	6.010	.	.	.	.	.	.
MAR	3.560	5.930	5.850	5.930	.	.	5.800	5.740	.	.
MAY	3.690	6.170	6.320	6.230	.	.	.	.	.	.
JUN	3.080	6.960	.	.	.	.	.	.	.	.
JUL	2.900	6.340	.	.	.	.	.	.	6.250	6.220
AUG	4.300	7.160	.	.	7.490	7.620	.	.	7.970	7.620
SEP	3.510	7.200	.	.	6.000	5.860	.	.	6.440	6.310
OCT	3.680	7.580	.	.	8.800	8.950	.	.	6.550	6.550
NOV	3.580	7.170	.	.	6.650	8.050	.	.	11S	8.030
DEC	4.400	7.140	.	.	.	6.290	.	.	.	.
TURBIDITY (FTU)			DET'N LIMIT = .02		GUIDELINE = 1.00 (A1)					
JAN	.640	.420	.380	.370	.	.	.330	1.050 RRV	.	.
FEB	.750	.850	.780	.550	.	.	.	.	.	.
MAR	.400	.130 <T	.220 <T	.230 <T	.	.	.400	.160 <T	.	.
MAY	.840	.430	.820	.720	.	.	.	.	.	.
JUN	1.150	.850	.	.	.	.	.	.	.	.
JUL	.940	.280	.	.	.	.	.	.	.620	.360
AUG	.750	.600	.	.	.700	.550	.	.	.750	.800
SEP	.130 <T	.600	.	.	.070 <T	.090 <T	.	.	.460	.200 <T
OCT	.680	.530	.	.	.740	.400	.	.	.740	.690
NOV	.670	.760	.	.	.150 <T	.180 <T	.	.	11S	.360
DEC	1.100	.370	.	.	.	.200 <T	.	.	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

SITE	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
TYPE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
METALS										
SILVER (UG/L)			DET'N LIMIT = .020		GUIDELINE = 50. (A1)					
JAN	BDL	.210 <T	.060 <T	.100 <T	.	.	.100 <T	.070 <T	.	.
FEB	BDL	.170 <T	BDL	.100 <T	.	.	.	.	.	.
MAR	BDL	.190 <T	.030 <T	.080 <T	.	.	.060 <T	.180 <T	.	.
MAY	.060 <T	.040 <T	.080 <T	BDL	.	.	.	.	.	.
JUN	BDL	BDL	.	.	.	.	.	.	.	.
JUL	BDL	BDL	.	.	.	.	.	.	.190 <T	.050 <T
AUG	BDL	BDL	.	.	.030 <T	BDL	.	.	.050 <T	IIP
SEP	BDL	BDL	.	.	BDL	.050 <T	.	.	BDL	BDL
OCT	BDL	BDL	.	.	BDL	BDL	.	.	BDL	BDL
NOV	BDL	BDL	.	.	BDL	BDL	.	.	BDL	BDL
DEC	BDL	BDL	.	.	.	BDL	.	.	.	.
ALUMINUM (UG/L)			DET'N LIMIT = .050		GUIDELINE = 100.(A4)					
JAN	13.920	19.720	18.560	18.560	.	.	17.400	18.560	.	.
FEB	7.888	20.880	20.880	24.360	.	.	.	.	.	.
MAR	10.092	20.880	17.400	18.560	.	.	18.560	18.560	.	.
MAY	12.760	30.160	54.520	44.080	.	.	.	.	.	.
JUN	12.000	43.000	.	.	.	.	.	.	.	.
JUL	15.000	83.000	.	.	.	.	.	.	62.000	50.000
AUG	22.000	32.000	.	.	54.000	74.000	.	.	42.000	IIP
SEP	12.000	8.200	.	.	33.000	34.000	.	.	42.000	37.000
OCT	11.000	26.000	.	.	26.000	27.000	.	.	24.000	25.000
NOV	12.000	28.000	.	.	20.000	19.000	.	.	17.000	16.000
DEC	14.000	31.000	.	.	.	20.000	.	.	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
METALS										
SILVER (UG/L)			DET'N LIMIT = .020 GUIDELINE = 50. (A1)							
JAN	BDL	.210 <T	.060 <T	.100 <T	.	.	.100 <T	.070 <T	.	.
FEB	BDL	.170 <T	BDL	.100 <T	.	.	.	.	.	.
MAR	BDL	.190 <T	.030 <T	.080 <T	.	.	.060 <T	.180 <T	.	.
MAY	.080 <T	.040 <T	.080 <T	BDL	.	.	.	.	.	.
JUN	BDL	BDL	.	.	.	.	.	.	.	.
JUL	BDL	BDL	.	.	.	.	.	.	.190 <T	.050 <
AUG	BDL	BDL	.	.	.030 <T	BDL	.	.	.050 <T	IIP
SEP	BDL	BDL	.	.	BDL	.050 <T	.	.	BDL	BDL
OCT	BDL	BDL	.	.	BDL	BDL	.	.	BDL	BDL
NOV	BDL	BDL	.	.	BDL	BDL	.	.	BDL	BDL
DEC	BDL	BDL	.	.	.	BDL	.	.	.	.
ALUMINUM (UG/L)			DET'N LIMIT = .050 GUIDELINE = 100.(A4)							
JAN	13.920	19.720	18.560	18.560	.	.	17.400	18.560	.	.
FEB	7.888	20.880	20.880	24.360	.	.	.	.	.	.
MAR	10.092	20.880	17.400	18.560	.	.	18.560	18.560	.	.
MAY	12.760	30.160	54.520	44.080	.	.	.	.	.	.
JUN	12.000	43.000	.	.	.	.	.	.	.	.
JUL	15.000	83.000	.	.	.	.	.	.	62.000	50.000
AUG	22.000	32.000	.	.	54.000	74.000	.	.	42.000	IIP
SEP	12.000	8.200	.	.	33.000	34.000	.	.	42.000	37.000
OCT	11.000	26.000	.	.	26.000	27.000	.	.	24.000	25.000
NOV	12.000	28.000	.	.	20.000	19.000	.	.	17.000	16.000
DEC	14.000	31.000	.	.	.	20.000	.	.	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

SITE TYPE	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
ARSENIC (UG/L)	DET'N LIMIT = 0.050 GUIDELINE = 50.0 (A1)									
JAN	.590 <T	.180 <T	.260 <T	.150 <T	.	.	.140 <T	.140 <T	.	.
FEB	1.200	.270 <T	.320 <T	.630 <T	.	.	.	.	.	.
MAR	1.100	.340 <T	.360 <T	.430 <T	.	.	.270 <T	.470 <T	.	.
MAY	.310 <T	.240 <T	.070 <T	.110 <T	.	.	.	.	.	.
JUN	1.100	.570 <T	.	.	.	.	.	.	.	.
JUL	.260 <T	BDL	.	.	.	.	.	.	BDL	BDL
AUG	1.100	.420 <T	.	.	.450 <T	.660 <T	.	.	.340 <T	IIP
SEP	.660 <T	.420 <T	.	.	.120 <T	.390 <T	.	.	.410 <T	.330 <
OCT	.440 <T	.130 <T	.	.	.120 <T	.080 <T	.	.	.150 <T	.220 <
NOV	.410 <T	.270 <T	.	.	.150 <T	.180 <T	.	.	.110 <T	.170 <
DEC	.510 <T	.180 <T	.	.	.	.180 <T	.	.	.	.
BARIUM (UG/L)	DET'N LIMIT = 0.020 GUIDELINE = 1000. (A1)									
JAN	10.000	10.000	11.000	9.700	.	.	9.800	10.000	.	.
FEB	10.000	10.000	11.000	10.000	.	.	.	.	.	.
MAR	10.000	10.000	11.000	10.000	.	.	10.000	9.900	.	.
MAY	11.000	10.000	12.000	10.000	.	.	.	.	.	.
JUN	11.000	10.000	.	.	.	.	.	.	.	.
JUL	11.000	11.000	.	.	.	.	.	.	.	.
AUG	10.000	10.000	.	.	11.000	12.000	.	.	13.000	11.000
SEP	11.000	9.900	.	.	11.000	11.000	.	.	11.000	IIP
OCT	10.000	10.000	.	.	12.000	12.000	.	.	11.000	11.000
NOV	10.000	10.000	.	.	10.000	11.000	.	.	10.000	10.000
DEC	9.700	9.400	.	.	.	9.200	.	.	9.900	9.800
BORON (UG/L)	DET'N LIMIT = 0.200 GUIDELINE = 5000. (A1)									

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

SITE TYPE	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
JAN	16.000 <T	14.000 <T	14.000 <T	3.800 <T	.	.	3.500 <T	7.900 <T	.	.
FEB	34.000	29.000	31.000	7.100 <T	.	.	.	.	.	.
MAR	28.000	26.000	21.000	17.000 <T	.	.	14.000 <T	24.000	.	.
MAY	8.200 <T	32.000	49.000	41.000	.	.	.	.	.	.
JUN	17.000 <T	11.000 <T	.	.	.	.	.	.	.	.
JUL	15.000 <T	15.000 <T	.	.	.	.	.	.	11.000 <T	10.000 <
AUG	20.000 <T	18.000 <T	.	.	19.000 <T	19.000 <T	.	.	8.200 <T	IIP
SEP	19.000 <T	3.700 <T	.	.	5.600 <T	21.000	.	.	21.000	6.700 <
OCT	9.800 <T	10.000 <T	.	.	11.000 <T	10.000 <T	.	.	6.500 <T	9.800 <
NOV	11.000 <T	12.000 <T	.	.	11.000 <T	9.800 <T	.	.	5.700 <T	5.700 <
DEC	6.700 <T	6.100 <T	.	.	.	5.900 <T	.	.	.	.
BERYLLIUM (UG/L)			DET'N LIMIT = 0.010 GUIDELINE = N/A							
JAN	BDL	.020 <T	BDL	BDL	.	.	BDL	BDL	.	.
FEB	.120 <T	BDL	BDL	BDL	.	.	.	.	.	.
MAR	.090 <T	.100 <T	.050 <T	.130 <T	.	.	.040 <T	.090 <T	.	.
MAY	BDL	BDL	BDL	BDL	.	.	.	.	.	.
JUN	BDL	.030 <T	.	.	.	.	.	.	.	.
JUL	BDL	BDL	.	.	.	.	.	.	BDL	BDL
AUG	.120 <T	.080 <T	.	.	.110 <T	.070 <T	.	.	BDL	IIP
SEP	BDL	BDL	.	.	BDL	BDL	.	.	.020 <T	BDL
OCT	.020 <T	.020 <T	.	.	.040 <T	.030 <T	.	.	BDL	BDL
NOV	BDL	.020 <T	.	.	BDL	BDL	.	.	BDL	BDL
DEC	BDL	BDL	.	.	.	BDL	.	.	.	.
CADMIUM (UG/L)			DET'N LIMIT = 0.050 GUIDELINE = 5.000 (A1)							
JAN	.090 <T	.080 <T	.070 <T	.080 <T	.	.	BDL	BDL	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

SITE TYPE	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
FEB	.090 <T	BDL	.060 <T	.090 <T	.	.	.	.	.	.
MAR	BDL	BDL	BDL	BDL	.	.	.090 <T	BDL	.	.
MAY	BDL	BDL	BDL	BDL	.	.	.	.	.	.
JUN	BDL	.060 <T	.	.	.	.	.	.	.	.
JUL	BDL	.070 <T	.	.	.	.	.	.	.	.
AUG	.080 <T	BDL	.	.	BDL	BDL	.	.	.330 <T	BDL
SEP	BDL	BDL	.	.	.110 <T	BDL	.	.	BDL	IIP
OCT	BDL	BDL	.	.	BDL	BDL	.	.	.060 <T	.080 <
NOV	BDL	BDL	.	.	BDL	BDL	.	.	BDL	BDL
DEC	BDL	BDL	.	.	.	BDL	.	.	BDL	BDL
COBALT (UG/L)	DET'N LIMIT = 0.020 GUIDELINE = N/A									
JAN	.040 <T	.070 <T	.060 <T	.060 <T	.	.	.070 <T	.130 <T	.	.
FEB	.170 <T	.160 <T	.210 <T	.170 <T	.	.	.	.	.	.
MAR	.100 <T	.130 <T	.170 <T	.110 <T	.	.	.140 <T	.170 <T	.	.
MAY	.060 <T	.070 <T	.060 <T	.100 <T	.	.	.	.	.	.
JUN	.120 <T	.120 <T	.	.	.	.	.	.	.	.
JUL	.150 <T	.170 <T	.	.	.	.	.	.	.	.
AUG	.120 <T	.140 <T	.	.	.160 <T	.120 <T	.	.	.180 <T	.140 <T
SEP	.150 <T	.310 <T	.	.	.130 <T	.150 <T	.	.	.090 <T	IIP
OCT	.040 <T	.060 <T	.	.	.080 <T	.050 <T	.	.	.150 <T	.160 <T
NOV	.060 <T	.050 <T	.	.	.050 <T	.070 <T	.	.	.040 <T	.070 <T
DEC	.070 <T	.070 <T	.	.	.	.070 <T	.	.	.030 <T	.060 <T
CHROMIUM (UG/L)	DET'N LIMIT = 0.100 GUIDELINE = 50. (A1)									
JAN	2.600	2.400	2.300	.190 <T	.	.	BDL	BDL	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

SITE	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
TYPE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
FEB	4.300	4.000	4.100	.320 <T	.	.	.	.	.	.
MAR	3.200	2.900	2.100	1.600	.	.	.680 <T	2.800	.	.
MAY	.130 <T	2.300	3.600	2.900	.	.	.	.	.	.
JUN	2.500	1.300	.	.	.	.	.	.	.	.
JUL	2.600	2.800	.	.	.	.	.	.	1.700	1.500
AUG	2.500	2.500	.	.	2.600	2.600	.	.	.720 <T	IIP
SEP	2.300	BDL	.	.	.400 <T	2.300	.	.	2.100	BDL
OCT	2.000	2.100	.	.	2.100	2.200	.	.	.310 <T	2.000
NOV	1.000 <T	1.300	.	.	1.100	.700 <T	.	.	BDL	BDL
DEC	BDL	BDL	.	.	.	BDL	.	.	.	.
COPPER (UG/L)			DET'N LIMIT = .100 GUIDELINE = 1000 (A3)							
JAN	1.100	1.000 <T	170.000	20.000	.	.	4.900	4.800	.	.
FEB	1.200	.860 <T	230.000	27.000	.	.	.	.	.	.
MAR	1.500	.980 <T	210.000	22.000	.	.	32.000	5.300	.	.
MAY	1.500	.910 <T	240.000	22.000	.	.	.	.	.	.
JUN	1.200	.790 <T	.	.	.	.	.	.	.	.
JUL	1.500	1.000 <T	.	.	.	.	.	.	65.000	12.000
AUG	1.400	.890 <T	.	.	290.000	42.000	.	.	48.000	IIP
SEP	1.200	13.000	.	.	55.000	46.000	.	.	24.000	20.000
OCT	1.500	.930 <T	.	.	240.000	59.000	.	.	31.000	29.000
NOV	1.300	1.100	.	.	68.000	48.000	.	.	16.000	25.000
DEC	1.400 <T	.850 <T	.	.	.	28.000	.	.	.	.
IRON (UG/L)			DET'N LIMIT = 4.000 GUIDELINE = 300. (A3)							
JAN	20.000 <T	13.000 <T	23.000 <T	21.000 <T	.	.	10.000 <T	18.000 <T	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

SITE TYPE	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
FEB	15.000 <T	BDL	6.100 <T	9.700 <T	.	.	.	.	.	.
MAR	17.000 <T	14.000 <T	6.600 <T	6.000 <T	.	.	5.600 <T	BDL	.	.
MAY	15.000 <T	BDL	10.000 <T	BDL	.	.	.	.	.	.
JUN	18.000 <T	BDL	.	.	.	.	.	.	.	.
JUL	34.000 <T	BDL	.	.	.	.	.	.	46.000 <T	42.000 <T
AUG	31.000 <T	BDL	.	.	BDL	BDL	.	.	77.000	IIP
SEP	19.000 <T	BDL	.	.	BDL	BDL	.	.	77.000	63.000
OCT	12.000 <T	BDL	.	.	BDL	BDL	.	.	27.000 <T	30.000 <T
NOV	12.000 <T	12.000 <T	.	.	BDL	BDL	.	.	46.000 <T	34.000 <T
DEC	13.000 <T	BDL	.	.	.	BDL	.	.	.	.
MERCURY (UG/L)			DET'N LIMIT = 0.010 GUIDELINE = 1.000 (A1)							
JAN	.030 <T	.020 <T	.	BDL	.	.	.	.080	.	.
FEB	.030 <T	.020 <T	.	BDL	.	.	.	.	.	.
MAR	.050 <T	.040 <T	.	BDL	.	.	.	.130	.	.
MAY	.030 <T	.040 <T	.	BDL	.	.	.	.	.	.
JUN	.050 <T	.040 <T	.	.	.	.	.	.	.	.
JUL	.070	.080	.	.	.	.	.	.	.	.060
AUG	BDL	BDL	.	.	.	BDL	.	.	.	BDL
SEP	.020 <T	.040 <T	.	.	.	BDL	.	.	.	.040 <T
OCT	.030 <T	.060	.	.	.	.060	.	.	.	.040 <T
NOV	.120	.110	.	.	.	.140	.	.	.	.070
DEC	.290	.300	.	.	.	.160	.	.	.	.
MANGANESE (UG/L)			DET'N LIMIT = .050 GUIDELINE = 50.0 (A3)							
JAN	1.100	.560	.670	.700	.	.	.530	.630	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
SITE TYPE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
FEB	1.500	.490 <T	.410 <T	.610	.	.	.	.	.	.
MAR	1.300	.470 <T	.310 <T	.560	.	.	.670	.520	.	.
MAY	1.800	1.100	.960	.940	.	.	.	.	.	.
JUN	1.000	.600	.	.	.	.	.	.	.	.
JUL	2.600	1.100	.	.	.	.	.	.	.	.
AUG	1.900	.630	.	.	.470 <T	.260 <T	.	.	3.600	3.300
SEP	1.700	.190 <T	.	.	.170 <T	.220 <T	.	.	2.500	IIP
OCT	1.500	.720	.	.	.580	.450 <T	.	.	2.800	2.200
NOV	.970	1.000	.	.	.110 <T	.110 <T	.	.	1.500	1.700
DEC	3.000	1.700	.	.	.	.380 <T	.	.	2.300	1.700
MOLYBDENUM (UG/L)			DET'N LIMIT = 0.020 GUIDELINE = N/A						.	.
JAN	.090 <T	.120 <T	.120 <T	.150 <T	.	.	.110 <T	.120 <T		
FEB	.350 <T	.260 <T	.350 <T	.330 <T	.	.	.	.	.	.
MAR	.300 <T	.260 <T	.280 <T	.250 <T	.	.	.220 <T	.190 <T	.	.
MAY	.290 <T	.300 <T	.300 <T	.300 <T	.	.	.	.	.	.
JUN	.190 <T	.190 <T	.	.	.	.	.	.	.	.
JUL	.270 <T	.330 <T	.	.	.	.	.	.	.	.
AUG	.250 <T	.320 <T	.	.	.300 <T	.350 <T	.	.	.220 <T	.110 <
SEP	.270 <T	.310 <T	.	.	.280 <T	.190 <T	.	.	.240 <T	IIP
OCT	.120 <T	.110 <T	.	.	.130 <T	.110 <T	.	.	.270 <T	.200 <
NOV	.060 <T	.080 <T	.	.	.090 <T	.100 <T	.	.	.130 <T	.140 <
DEC	.150 <T	.150 <T	.	.	.	.110 <T	.	.	.100 <T	.090 <
NICKEL (UG/L)			DET'N LIMIT = 0.100 GUIDELINE = 50. (F3)						.	.
JAN	BDL	BDL	1.000 <T	BDL	.	.	BDL	.270 <T		

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

	SITE TYPE	WATER TREATMENT PLANT		DISTRIBUTION SYSTEN							
		RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
				STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
FEB		.430 <T	.440 <T	1.800 <T	.560 <T	.	.	.	.	.	.
MAR		.180 <T	.240 <T	1.800 <T	.380 <T	.	.	3.300	.350 <T	.	.
MAY		BDL	BDL	.320 <T	BDL	.	.	.	.	.	.
JUN		BDL	BDL	.	.	.	.	.	.	.	.
JUL		BDL	BDL	.	.	.	.	.	.	.110 <T	BDL
AUG		.340 <T	.310 <T	.	.	.610 <T	.400 <T	.	.	.140 <T	IIP
SEP		.380 <T	.250 <T	.	.	.220 <T	.210 <T	.	.	BDL	.150 <
OCT		BDL	BDL	.	.	BDL	BDL	.	.	BDL	.240 <
NOV		BDL	BDL	.	.	BDL	BDL	.	.	BDL	BDL
DEC		BDL	BDL	.	.	.	BDL	.	.	.	.
LEAD (UG/L)		DET'N LIMIT = 0.050 GUIDELINE = 50. (A1)									
JAN		.040 <T	.040 <T	1.400	.220	.	.	.190 <T	.310	.	.
FEB		BDL	.030 <T	1.900	.440	.	.	.	.	.	.
MAR		.090 <T	.140 <T	1.600	.460	.	.	2.200	.480	.	.
MAY		.160 <T	BDL	2.100	.300	.	.	.	.	.	.
JUN		.260	.260	.	.	.	.	.	.	.	.
JUL		.180 <T	.050 <T	.	.	.	.	.	.	7.000	1.400
AUG		.030 <T	.120 <T	.	.	8.900	1.700	.	.	4.500	IIP
SEP		.040 <T	BDL	.	.	1.300	1.800	.	.	2.400	1.700
OCT		BDL	BDL	.	.	2.800	2.400	.	.	3.000	3.700
NOV		BDL	.060 <T	.	.	.830	1.900	.	.	1.200	1.400
DEC		BDL	BDL	.	.	.	.830	.	.	.	.
ANTIMONY (UG/L)		DET'N LIMIT = .050 GUIDELINE = 146. (D4)									
JAN		.340	.320	.330	.370	.	.	.260	.420	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

SITE	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
TYPE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
FEB	.530	.520	.530	.640	.	.	.	.	.	.
MAR	.590	.600	.710	.590	.	.	.680	.660	.	.
MAY	.530	.570	.580	.520	.	.	.	.	.	.
JUN	.710	.810	.	.	.	.	.	.	.	.
JUL	.800	.670	.	.	.	.	.	.	.	.
AUG	.650	.610	.	.	.710	.650	.	.	.770	.670
SEP	.510	3.100	.	.	.500	.600	.	.	.550	IIP
OCT	.380	.440	.	.	.520	.400	.	.	.530	.480
NOV	.380	.310	.	.	.350	.290	.	.	.370	.370
DEC	.400 <T	.390 <T	.	.	.	.370 <T	.	.	.300	.300
SELENIUM (UG/L)			DET'N LIMIT = 0.200 GUIDELINE = 10. (A1)							
JAN	BDL	BDL	.440 <T	BDL	.	.	BDL	BDL	.	.
FEB	BDL	BDL	BDL	BDL	.	.	.	.	.	.
MAR	.410 <T	BDL	.690 <T	BDL	.	.	BDL	1.800 <T	.	.
MAY	.750 <T	BDL	.320 <T	BDL	.	.	.	.	.	.
JUN	BDL	1.400 <T	.	.	.	.	.	.	.	.
JUL	BDL	BDL	.	.	.	.	.	.	.	.
AUG	BDL	BDL	.	.	1.300 <T	1.300 <T	.	.	1.900 <T	1.500 <T
SEP	BDL	BDL	.	.	BDL	BDL	.	.	BDL	IIP
OCT	BDL	BDL	.	.	BDL	BDL	.	.	BDL	BDL
NOV	BDL	BDL	.	.	BDL	BDL	.	.	BDL	BDL
DEC	BDL	BDL	.	.	.	BDL	.	.	.	.
STRONTIUM (UG/L)			DET'N LIMIT = .050 GUIDELINE = N/A							
JAN	22.000	23.000	24.000	24.000	.	.	23.000	25.000	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

SITE	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
TYPE	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
FEB	25.000	23.000	26.000	26.000	.	.	.	.	.	.
MAR	25.000	23.000	26.000	25.000	.	.	24.000	24.000	.	.
MAY	23.000	24.000	27.000	26.000	.	.	.	.	.	.
JUN	25.000	23.000	.	.	.	.	.	.	.	.
JUL	25.000	26.000	.	.	.	.	.	.	.	.
AUG	24.000	25.000	.	.	.	.	.	.	27.000	26.000
SEP	25.000	47.000	.	.	27.000	29.000	.	.	24.000	IIP
OCT	25.000	23.000	.	.	26.000	28.000	.	.	25.000	25.000
NOV	22.000	23.000	.	.	28.000	27.000	.	.	24.000	24.000
DEC	24.000	23.000	.	.	24.000	24.000	.	.	22.000	23.000
					.	24.000	.	.	.	.
TITANIUM (UG/L)			DET'N LIMIT = .050 GUIDELINE = N/A							
JAN	3.000	2.300	2.500	2.300	.	.	2.400	2.800	.	.
FEB	3.200	2.900	2.900	2.900	.	.	.	.	.	.
MAR	3.200	2.700	2.800	2.300	.	.	2.200	2.500	.	.
MAY	4.200	4.400	4.200	4.200	.	.	.	.	.	.
JUN	5.300	4.900	.	.	.	.	.	.	.	.
JUL	4.500	3.600	.	.	.	.	.	.	.	.
AUG	4.300	3.700	.	.	3.700	3.200	.	.	3.800	3.800
SEP	4.500	3.500	.	.	4.200	4.300	.	.	3.100	IIP
OCT	2.600	2.400	.	.	2.300	2.500	.	.	4.100	4.200
NOV	2.000 <T	1.800 <T	.	.	1.700 <T	1.700 <T	.	.	2.100	2.300
DEC	2.800 <T	1.900 <T	.	.	.	2.000 <T	.	.	1.800 <T	1.700 <T
									.	.
THALLIUM (UG/L)			DET'N LIMIT = .010 GUIDELINE = 13. (D4)							
JAN	.020 <T	BDL	.020 <T	BDL	.	.	BDL	BDL	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

SITE	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
			SITE 1		SITE 3		SITE 2		SITE 4	
TYPE	RAW	TREATED	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
FEB	.060 <T	.050 <T	.030 <T	.070 <T	.	.	.	.	.	.
MAR	BDL	BDL	.040 <T	BDL	.	.	.	.	.	.
MAY	.020 <T	.050 <T	.080 <T	BDL	.	.	.030 <T	BDL	.	.
JUN	BDL	BDL	.	.	.	.	.	.	.	.
JUL	BDL	BDL	.	.	.	.	.	.	.	.
AUG	.020 <T	.020 <T	.	.	.	.	.	.	.	.
SEP	BDL	BDL	.	.	BDL	.020 <T	.	.	BDL	BDL
OCT	BDL	BDL	.	.	BDL	BDL	.	.	BDL	IIP
NOV	BDL	BDL	.	.	BDL	BDL	.	.	BDL	BDL
DEC	BDL	BDL	.	.	.020 <T	BDL	.	.	BDL	BDL
			.	.	.	BDL	.	.	BDL	BDL
URANIUM (UG/L)			DET'N LIMIT = .020 GUIDELINE = 100.(B1)						.	.
JAN	.060 <T	BDL	BDL	BDL						
FEB	.100 <T	.060 <T	BDL	BDL	.	.	.030 <T	.030 <T	.	.
MAR	.100 <T	.070 <T	.090 <T	.040 <T	.	.	.	.	.	.
MAY	.070 <T	.050 <T	.030 <T	.030 <T	.	.	.040 <T	.050 <T	.	.
JUN	.050 <T	BDL	.	.	.	.	.	.	.	.
JUL	BDL	.030 <T	.	.	.	.	.	.	.	.
AUG	.070 <T	BDL	.	.	.	.	.	.	.	.
SEP	.090 <T	.050 <T	.	.	.090 <T	.040 <T	.	.	BDL	BDL
OCT	.050 <T	BDL	.	.	BDL	BDL	.	.	.060 <T	IIP
NOV	.030 <T	BDL	.	.	BDL	BDL	.	.	.040 <T	.040
DEC	.070 <T	BDL	.	.	BDL	BDL	.	.	BDL	BDL
			.	.	.	BDL	.	.	BDL	BDL
VANADIUM (UG/L)			DET'N LIMIT = .050 GUIDELINE = N/A						.	.
JAN	.120 <T	.370 <T	.320 <T	.290 <T	.	.	.310 <T	.530	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

SITE TYPE	WATER TREATMENT PLANT RAW	WATER TREATMENT PLANT TREATED	DISTRIBUTION SYSTEM SITE 1 STANDING	SITE 1 FREE FLOW	SITE 3 STANDING	SITE 3 FREE FLOW	SITE 2 STANDING	SITE 2 FREE FLOW	SITE 4 STANDING	SITE 4 FREE FLOW
FEB	.310 <T	.570	.510	.490 <T	.	.	.	.	.	.
MAR	.310 <T	.470 <T	.470 <T	.490 <T	.	.	.	.	.	.
MAY	.280 <T	.520	.530	.430 <T	.	.	.490 <T	.470 <T	.	.
JUN	.300 <T	.580	.	.	.	.	.	.	.	.
JUL	.370 <T	.630	.	.	.	.	.	.	.	.
AUG	.370 <T	.560	.	.	.	.	.	.	.640	.620
SEP	.240 <T	.520	.	.	.530	.630	.	.	.500 <T	IIP
OCT	.230 <T	.480 <T	.	.	.500 <T	.520	.	.	.490 <T	.440 <T
NOV	.250 <T	.480 <T	.	.	.370 <T	.460 <T	.	.	.370 <T	.400 <T
DEC	.330 <T	.600	.	.	.480 <T	.470 <T	.	.	.380 <T	.410 <T
					.	.530	.	.	.	.
ZINC (UG/L)			DET'N LIMIT = .001 GUIDELINE = 5000. (A3)							
JAN	1.100	.530 <T	9.300	1.000 <T	.	.	1.300	1.100	.	.
FEB	1.200	.610 <T	12.000	2.400	.	.	.	.	.	.
MAR	1.300	.760 <T	9.600	1.500	.	.	11.000	2.000	.	.
MAY	1.900	1.700	19.000	2.300	.	.	.	.	.	.
JUN	2.500	1.600	.	.	.	.	.	.	.	.
JUL	1.700	.830 <T	.	.	.	.	.	.	.	.
AUG	1.800	.870 <T	.	.	21.000	3.000	.	.	32.000	2.200
SEP	1.900	.180 <T	.	.	4.100	3.100	.	.	23.000	IIP
OCT	1.700	.380 <T	.	.	6.300	3.800	.	.	9.900	4.300
NOV	1.600	1.100	.	.	5.000	3.700	.	.	18.000	16.000
DEC	2.300	.610 <T	.	.	.	3.400	.	.	1.800	2.500
									.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

SITE	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
TYPE			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
PESTICIDES & PCB										
ALPHA BHC (NG/L)			DET'N LIMIT = 1.000		GUIDELINE = 700 (G)					
JAN	4.000 <T	BDL	.	BDL	.	.	.	4.000 <T	.	.
FEB	5.000 <T	BDL	.	6.000 <T	.	.	.	.	.	.
MAR	3.000 <T	3.000 <T	.	3.000 <T	.	.	.	4.000 <T	.	.
MAY	BDL	BDL	.	3.000 <T	.	.	.	.	.	.
JUN	6.000 <T	10.000 <T	.	.	.	.	.	.	.	.
JUL	6.000 <T	BDL	.	.	.	.	.	.	.	.
AUG	4.000 <T	5.000 <T	.	.	.	.	.	.	.	5.000 <T
SEP	5.000 <T	4.000 <T	.	.	.	BDL	.	.	.	IQU
OCT	3.000 <T	3.000 <T	.	.	.	5.000 <T	.	.	.	5.000 <T
NOV	1.000 <T	BDL	.	.	.	2.000 <T	.	.	.	3.000 <T
DEC	5.000 <T	3.000 <T	.	.	.	BDL	.	.	.	BDL
						5.000 <T				.
LINDANE (NG/L)			DET'N LIMIT = 1.000		GUIDELINE = 4000 (A1)					
JAN	BDL	BDL	.	BDL	.	.	.	BDL	.	.
FEB	1.000 <T	BDL	.	BDL	.	.	.	.	.	.
MAR	BDL	BDL	.	BDL	.	.	.	1.000 <T	.	.
MAY	BDL	BDL	.	BDL	.	.	.	.	.	.
JUN	BDL	2.000 <T	.	.	.	.	.	.	.	.
JUL	BDL	BDL	.	.	.	.	.	.	.	.
AUG	BDL	BDL	.	.	.	.	.	.	.	BDL
SEP	BDL	BDL	.	.	.	BDL	.	.	.	IQU
OCT	BDL	BDL	.	.	.	BDL	.	.	.	BDL
NOV	BDL	BDL	.	.	.	BDL	.	.	.	BDL
DEC	BDL	BDL	.	.	.	BDL	.	.	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

SITE TYPE	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
PHENOLICS (UG/L)	PHENOLICS		DET'N LIMIT = 0.2		GUIDELINE = 2.00 (A3)					
JAN	1.600	1.000	.	.	.	.	.	.	.	.
FEB	1.200	.600	.	.	.	.	.	.	.	.
MAR	.600 <T	.400 <T	.	.	.	.	.	.	.	.
MAY	.600 <T	1.000	.	.	.	.	.	.	.	.
JUN	.400 <T	.800 <T	.	.	.	.	.	.	.	.
JUL	.800 <T	1.200	.	.	.	.	.	.	.	.
AUG	4.600	1.200	.	.	.	.	.	.	.	.
SEP	2.400	1.000	.	.	.	.	.	.	.	.
OCT	1.000 <T	1.000 <T	.	.	.	.	.	.	.	.
NOV	.800 <T	BDL	.	.	.	.	.	.	.	.
DEC	1.200	.600 <T	.	.	.	.	.	.	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

SITE		WATER TREATMENT PLANT		DISTRIBUTION SYSTEM					
	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
TYPE			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
VOLATILES										
BENZENE (UG/L)			DET'N LIMIT = .050 GUIDELINE = 5.0 (81)							
FEB	BDL	BDL	.	BDL	.	.	.	.	.	.
MAR	BDL	BDL	.	BDL	.	.	.	BDL	.	.
MAY	BDL	BDL	.	BDL	.	.	.	.	.	.
JUN	BDL	BDL	.	.	.	.	.	.	.	.
JUL	BDL	BDL	.	.	.	.	.	.	.	.
AUG	BDL	.100 <T	.	.	.	.	.	.	.	BDL
SEP	BDL	BDL	.	.	.	BDL	.	.	.	BDL
OCT	BDL	BDL	.	.	.	!U	.	.	.	BDL
NOV	BDL	BDL	.	.	.	BDL	.	.	.	BDL
DEC	.	.	.	.	.	BDL	.	.	.	BDL
TOLUENE (UG/L)			DET'N LIMIT = .050 GUIDELINE = 24.0 (84)							
FEB	BDL	BDL	.	BDL	.	.	.	.	.	.
MAR	BDL	BDL	.	BDL	.	.	.	BDL	.	.
MAY	BDL	BDL	.	BDL	.	.	.	.	.	.
JUN	BDL	BDL	.	.	.	.	.	.	.	.
JUL	BDL	BDL	.	.	.	.	.	.	.	.
AUG	.050 <T	BDL	.	.	.	.	.	.	.	.
SEP	.100 <T	BDL	.	.	.	BDL	.	.	.	BDL
OCT	BDL	BDL	.	.	.	!U	.	.	.	BDL
NOV	BDL	BDL	.	.	.	BDL	.	.	.	BDL
DEC	.	.	.	.	.	BDL	.	.	.	BDL
						.050 <T				BDL
ETHYLBENZENE (UG/L)			DET'N LIMIT = .050 GUIDELINE = 2.4 (84)							
FEB	BDL	BDL	.	BDL	.	.	.	.	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

SITE TYPE	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
MAR	.050 <T	BDL	.	BDL	.	.	.	BDL	.	.
MAY	BDL	BDL	.	BDL	.	.	.	.	.	.
JUN	BDL	BDL	.	.	.	.	.	.	.	.
JUL	BDL	BDL	.	.	.	.	.	.	.	.
AUG	BDL	BDL	.	.	.	.	.	.	.	BDL
SEP	BDL	BDL	.	.	.	BDL	.	.	.	BDL
OCT	BDL	BDL	.	.	.	IU	.	.	.	BDL
NOV	BDL	BDL	.	.	.	BDL	.	.	.	BDL
DEC	.	.	.	.	.	BDL	.	.	.	BDL
O-XYLENE (UG/L)			DET'N LIMIT = .050 GUIDELINE = 300 (84)							
FEB	BDL	BDL	.	BDL	.	.	.	.	.	.
MAR	BDL	BDL	.	BDL	.	.	.	BDL	.	.
MAY	BDL	BDL	.	BDL	.	.	.	.	.	.
JUN	BDL	BDL	.	.	.	.	.	.	.	.
JUL	BDL	BDL	.	.	.	.	.	.	.	.
AUG	BDL	BDL	.	.	.	.100 <T	.	.	.	BDL
SEP	BDL	BDL	.	.	.	IU	.	.	.	BDL
OCT	BDL	BDL	.	.	.	BDL	.	.	.	BDL
NOV	BDL	BDL	.	.	.	BDL	.	.	.	BDL
DEC	.	.	.	.	.	.050 <T	.	.	.	.
STYRENE (UG/L)			DET'N LIMIT = .050 GUIDELINE = 46.5 (D2)							
FEB	.200 <T	BDL	.	BDL	.	.	.	.	.	.
MAR	.300 <T	BDL	.	BDL	.	.	.	BDL	.	.
MAY	.100 <T	BDL	.	BDL	.	.	.	.	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

SITE TYPE	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
JUN	.150 <T	BDL	.	.	.	.	.	.	.	.
JUL	.150 <T	BDL	.	.	.	.	.	.	.	BDL
AUG	.100 <T	BDL	.	.	.	BDL	.	.	.	BDL
SEP	BDL	BDL	.	.	.	IU	.	.	.	BDL
OCT	BDL	.300 <T	.	.	.	BDL	.	.	.	.200 <
NOV	.200 <T	.100 <T	.	.	.	BDL	.	.	.	BDL
DEC	.	.	.	.	.	.050 <T	.	.	.	.
CHLOROFORM (UG/L)			DET'N LIMIT = .100 GUIDELINE = 350 (A1+)							
FEB	.200 <T	31.000	.	27.400	.	.	.	.	.	.
MAR	.300 <T	33.800	.	40.200	.	.	.	44.200	.	.
MAY	.700 <T	37.500	.	43.600	.	.	.	.	.	.
JUN	BDL	44.400	.	.	.	.	.	.	.	.
JUL	1.300	44.900	.	.	.	.	.	.	.	60.400
AUG	.300 <T	35.100	.	.	.	62.100	.	.	.	53.000
SEP	.200 <T	52.000	.	.	.	IU	.	.	.	41.300
OCT	BDL	39.400	.	.	.	48.400	.	.	.	.43.500
NOV	BDL	42.300	.	.	.	43.300	.	.	.	26.800
DEC	.	.	.	.	.	36.800	.	.	.	.
111, TRICHLOROETHANE (UG/L)			DET'N LIMIT = .020 GUIDELINE = 200 (D1)							
FEB	BDL	BDL	.	BDL	.	.	.	.	.	.
MAR	.180 <T	.200	.	.140 <T	.	.	.	.340	.	.
MAY	BDL	BDL	.	BDL	.	.	.	.	.	.
JUN	BDL	BDL	.	.	.	.	.	.	.	.
JUL	BDL	BDL	.	.	.	.	.	.	.	BDL

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

SITE TYPE	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM							
	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
AUG	BDL	BDL	.	.	.	BDL	.	.	.	BDL
SEP	BDL	BDL	.	.	.	IU	.	.	.	BDL
OCT	BDL	BDL	.	.	.	BDL	.	.	.	BDL
NOV	BDL	BDL	.	.	.	BDL	.	.	.	BDL
DEC	.	.	.	.	.	BDL	.	.	.	.
DICHLOROBROMOMETHANE (UG/L)			DET'N LIMIT = .050 GUIDELINE = 350 (A1+)							
FEB	BDL	4.750	.	4.100	.	.	.	.	.	.
MAR	BDL	4.550	.	5.200	.	.	.	5.600	.	.
MAY	BDL	3.700	.	4.300	.	.	.	.	.	.
JUN	BDL	4.850	.	.	.	.	.	.	.	.
JUL	BDL	4.250	.	.	.	.	.	.	.	5.250
AUG	BDL	4.450	.	.	.	5.250	.	.	.	4.900
SEP	BDL	4.900	.	.	.	IU	.	.	.	4.500
OCT	BDL	4.800	.	.	.	4.900	.	.	.	5.100
NOV	BDL	4.400	.	.	.	4.600	.	.	.	4.400
DEC	.	.	.	.	.	3.800	.	.	.	.
CHLORODIBROMOMETHANE (UG/L)			DET'N LIMIT = .100 GUIDELINE = 350 (A1+)							
FEB	BDL	.500 <T	.	.400 <T	.	.	.	.	.	.
MAR	BDL	.500 <T	.	.500 <T	.	.	.	.500 <T	.	.
MAY	BDL	.300 <T	.	.500 <T	.	.	.	.	.	.
JUN	BDL	.700 <T	.	.	.	.	.	.	.	.
JUL	BDL	.400 <T	.	.	.	.	.	.	.	.600 <
AUG	BDL	.500 <T	.	.	.	.500 <T	.	.	.	BDL
SEP	BDL	.500 <T	.	.	.	IU	.	.	.	.500 <

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

SITE		WATER TREATMENT PLANT	DISTRIBUTION SYSTEM							
	RAW	TREATED	SITE 1		SITE 3		SITE 2		SITE 4	
TYPE			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
OCT	BDL	.600 <T	.	.	.	.700 <T	.	.	.	.400 <T
NOV	BDL	1.200	.	.	.	.700 <T	.	.	.	.800 <T
DEC	.	.	.	.	.	.500 <T	.	.	.	.
BROMOFORM (UG/L)			DET'N LIMIT = .200 GUIDELINE = 350 (A1+)							
FEB	BDL	BDL	.	BDL	.	.	.	.	.	.
MAR	BDL	BDL	.	BDL	.	.	.	BDL	.	.
MAY	BDL	BDL	.	BDL	.	.	.	.	.	.
JUN	BDL	BDL	.	.	.	.	.	.	.	.
JUL	BDL	BDL	.	.	.	.	.	.	.	.
AUG	BDL	BDL	.	.	.	BDL	.	.	.	BDL
SEP	BDL	BDL	.	.	.	IU	.	.	.	BDL
OCT	BDL	BDL	.	.	.	BDL	.	.	.	BDL
NOV	BDL	.400 <T	.	.	.	BDL	.	.	.	BDL
DEC	.	.	.	.	.	BDL	.	.	.	.
TOTL TRIHALOMETHANES (UG/L)			DET'N LIMIT = .500 GUIDELINE = 350 (A1)							
FEB	BDL	36.250	.	31.900	.	.	.	.	.	.
MAR	BDL	35.850	.	45.900	.	.	.	50.300	.	.
MAY	.700 <T	41.500	.	48.400	.	.	.	.	.	.
JUN	BDL	49.950	.	.	.	.	.	.	.	.
JUL	1.300 <T	49.550	.	.	.	.	.	.	.	.
AUG	BDL	40.050	.	.	.	67.850	.	.	.	66.250
SEP	BDL	57.400	.	.	.	IU	.	.	.	57.900
OCT	BDL	44.800	.	.	.	54.000	.	.	.	46.300
NOV	BDL	48.300	.	.	.	48.600	.	.	.	49.000
										32.000

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM THUNDER BAY (BARE POINT WTP) 1989

SITE TYPE	RAW	TREATED	WATER TREATMENT PLANT				DISTRIBUTION SYSTEM			
			SITE 1		SITE 3		SITE 2		SITE 4	
			STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW	STANDING	FREE FLOW
DEC	.	.	.	.	.	41,100	.	.	.	.

TRACE LEVELS OF TOLUENE ARE LABORATORY ARTIFACTS DERIVED FROM THE ANALYTICAL METHODOLOGY.

TRACE LEVELS OF STYRENE ARE CONSIDERED TO BE LABORATORY ARTIFACTS RESULTING FROM THE LABORATORY SHIPPING CONTAINERS.

Table 6

SCAN/PARAMETER	UNIT	DETECTION LIMIT	GUIDELINE
BACTERIOLOGICAL			
FECAL COLIFORM MEMBRANE FILTRATION	CT/100ML	0	0 (A1)
STANDARD PLATE COUNT MEMBRANE FILTRATION	CT/ML	0	500/ML (A1)
TOTAL COLIFORM MEMBRANE FILTRATION	CT/100ML	0	5/100mL (A1)
TOTAL COLIFORM BACKGROUND MF	CT/100ML	0	N/A
CHLOROAROMATICS			
HEXACHLOROBUTADIENE	NG/L	1.000	450. (D4)
1,2,3-TRICHLOROBENZENE	NG/L	5.000	10000 (I)
1,2,3,4-TETRACHLOROBENZENE	NG/L	1.000	10000 (I)
1,2,3,5-TETRACHLOROBENZENE	NG/L	1.000	10000 (I)
1,2,4-TRICHLOROBENZENE	NG/L	5.000	10000 (I)
1,2,4,5-TETRACHLOROBENZENE	NG/L	1.000	38000 (D4)
1,3,5-TRICHLOROBENZENE	NG/L	5.000	10000 (D4)
HEXACHLOROBENZENE	NG/L	1.0	10. (C1)
HEXACHLOROETHANE	NG/L	1.000	1900. (D4)
OCTACHLOROSTYRENE	NG/L	1.000	N/A
PENTACHLOROBENZENE	NG/L	1.000	74000 (D4)
2,3,6-TRICHLOROTOLUENE	NG/L	5.000	N/A
2,4,5-TRICHLOROTOLUENE	NG/L	5.000	N/A
2,6,A-TRICHLOROTOLUENE	NG/L	5.000	N/A
CHLOROPHENOLS			
2,3,4-TRICHLOROPHENOL	NG/L	50.	N/A
2,3,4,5-TETRACHLOROPHENOL	NG/L	50.	N/A
2,3,5,6-TETRACHLOROPHENOL	NG/L	50.	N/A
2,4,5-TRICHLOROPHENOL	NG/L	50.	2600000 (D4)
2,4,6-TRICHLOROPHENOL	NG/L	50.	2000. (B4)
PENTACHLOROPHENOL	NG/L	50.	30000. (B4)
CHEMISTRY (FLD)			
FIELD COMBINED CHLORINE RESIDUAL	MG/L	N/A	N/A
FIELD FREE CHLORINE RESIDUAL	MG/L	N/A	N/A
FIELD TOTAL CHLORINE RESIDUAL	MG/L	N/A	N/A
FIELD PH	DMSNLESS	N/A	6.5-8.5 (A4)
FIELD TEMPERATURE	°C	N/A	<15 °C (A1)
FIELD TURBIDITY	FTU	N/A	1.0 (A1)
CHEMISTRY (LAB)			
ALKALINITY	MG/L	.200	30-500 (A4)
CALCIUM	MG/L	.100	100. (F2)
CYANIDE	MG/L	.001	.20 (A1)
CHLORIDE	MG/L	.200	250. (A3)
COLOUR	TCU	.5	5.0 (A3)
CONDUCTIVITY	UMHO/CM	1.	400. (F2)
FLUORIDE	MG/L	.01	2.4 (A1)
HARDNESS	MG/L	.50	80-100 (A4)
MAGNESIUM	MG/L	.05	30. (F2)

SCAN/PARAMETER	UNIT	DETECTION LIMIT	GUIDELINE
NITRITE	MG/L	.001	1.0 (A1)
TOTAL NITRATES	MG/L	.02	10. (A1)
NITROGEN TOTAL KJELDAHL	MG/L	.02	N/A
PH	DMSNLESS	N/A	6.5-8.5(A4)
PHOSPHORUS FIL REACT	MG/L	.0005	N/A
PHOSPHORUS TOTAL	MG/L	.002	.40(F2)
TOTAL SOLIDS	MG/L	1.	500. (A3)
TURBIDITY	FTU	.02	1.0 (A1)
METALS			
ALUMINUM	UG/L	.050	100. (A4)
ANTIMONY	UG/L	.050	10. (F3)
ARSENIC	UG/L	.050	50. (A1)
BARIUM	UG/L	.020	1000. (A1)
BORON	UG/L	.200	5000. (A1)
BERYLLIUM	UG/L	.010	0.20 (H)
CADMIUM	UG/L	.050	5.0 (A1)
COBALT	UG/L	.020	1000. (H)
CHROMIUM	UG/L	.100	50. (A1)
COPPER	UG/L	.100	1000. (A3)
IRON	UG/L	5.0	300. (A3)
MERCURY	UG/L	.01	1.0 (A1)
MANGANESE	UG/L	.050	50. (A3)
MOLYBDENUM	UG/L	.020	500. (H)
NICKEL	UG/L	.100	50. (F3)
LEAD	UG/L	.020	50. (A1)
SELENIUM	UG/L	.200	10. (A1)
SILVER	UG/L	.020	50. (A1)
STRONTIUM	UG/L	.100	2000. (H)
THALLIUM	UG/L	.010	13. (D4)
TITANIUM	UG/L	.100	N/A
URANIUM	UG/L	.020	20. (A2)
VANADIUM	UG/L	.020	100. (H)
ZINC	UG/L	.020	5000. (A3)
PHENOLICS			
PHENOLICS (UNFILTERED REACTIVE)	UG/L	.2	2.0 (A3)
PESTICIDES & PCB			
ALDRIN	NG/L	1.0	700. (A1)
AMETRINE	NG/L	50.	300000. (D3)
ATRAZINE	NG/L	50.	60000. (B3)
ALPHA HEXACHLOROCYCLOHEXANE (BHC)	NG/L	1.0	700. (G)
BETA HEXACHLOROCYCLOHEXANE (BHC)	NG/L	1.0	300. (G)
GAMMA HEXACHLOROCYCLOHEXANE(LINDANE)	NG/L	1.0	4000. (A1)
ALPHA CHLORDANE	NG/L	2.0	7000. (A1)
GAMMA CHLORDANE	NG/L	2.0	7000. (A1)
BLADEX	NG/L	100.	10000. (B3)
DIELDRIN	NG/L	2.0	700. (A1)
METHOXYCHLOR	NG/L	5.0	900000. (B1)
ENDOSULFAN 1 (THIODAN I)	NG/L	2.0	74000. (D4)
ENDOSULFAN 2 (THIODAN II)	NG/L	4.0	74000. (D4)
ENDRIN	NG/L	4.0	200. (A1)
ENDOSULFAN SULPHATE(THIODAN SULPHATE)	NG/L	4.0	N/A
HEPTACHLOR EPOXIDE	NG/L	1.0	3000. (A1)

SCAN/PARAMETER	UNIT	DETECTION LIMIT	GUIDELINE	
HEPTACHLOR	NG/L	1.0	3000.	(A1)
METOLACHLOR	NG/L	500.	50000.	(B3)
MIREX	NG/L	5.0	N/A	
OXYCHLORDANE	NG/L	2.0	N/A	
O,P-DDT	NG/L	5.0	30000.	(A1)
PCB	NG/L	20.0	3000.	(A2)
O,P-DDD	NG/L	5.0	N/A	
PPDDE	NG/L	1.0	30000.	(A1)
PPDDT	NG/L	5.0	30000.	(A1)
ATRATONE	NG/L	50.	N/A	
ALACHLOR	NG/L	500.	35000.	(D2)
PROMETONE	NG/L	50.	52500.	(D3)
PROPAZINE	NG/L	50.	16000.	(D2)
PROMETRYNE	NG/L	50.	1000.	(B3)
SENCOR (METRIBUZIN)	NG/L	100.	80000.	(B2)
SIMAZINE	NG/L	50.	10000.	(B3)
POLYAROMATIC HYDROCARBONS				
PHENANTHRENE	NG/L	10.0	N/A	
ANTHRACENE	NG/L	1.0	N/A	
FLUORANTHENE	NG/L	20.0	42000.	(D4)
PYRENE	NG/L	20.0	N/A	
BENZO(A)ANTHRACENE	NG/L	20.0	N/A	
CHRYSENE	NG/L	50.0	N/A	
DIMETHYL BENZO(A)ANTHRACENE	NG/L	5.0	N/A	
BENZO(E)PYRENE	NG/L	50.0	N/A	
BENZO(B)FLUORANTHENE	NG/L	10.0	N/A	
PERYLENE	NG/L	10.0	N/A	
BENZO(K)FLUORANTHENE	NG/L	1.0	N/A	
BENZO(A)PYRENE	NG/L	5.0	10.	(B1)
BENZO(G,H,I)PERYLENE	NG/L	20.0	N/A	
DIBENZO(A,H)ANTHRACENE	NG/L	10.0	N/A	
INDENO(1,2,3-C,D)PYRENE	NG/L	20.0	N/A	
BENZO(B)CHRYSENE	NG/L	2.0	N/A	
CORONENE	NG/L	10.0	N/A	
SPECIFIC PESTICIDES				
TOXAPHENE	NG/L	N/A	5000.	(A1)
2,4,5-TRICHLOROBUTYRIC ACID (2,4,5-T)	NG/L	50.	200000.	(B4)
2,4-DICHLOROBUTYRIC ACID (2,4-D)	NG/L	100.	100000.	(A1)
2,4-DICHLORORPHENOXYBUTYRIC ACID	NG/L	200.	18000.	(B3)
2,4-D PROPIONIC ACID	NG/L	100.	N/A	
DICAMBA	NG/L	100.	120000.	(B1)
PICLORAM	NG/L	100.	190000.	(B3)
SILVEX (2,4,5-TP)	NG/L	50.	10000.	(A1)
DIAZINON	NG/L	20.	20000.	(B1)
DICHLOROVOS	NG/L	20.	N/A	
DURSBAN	NG/L	20.	N/A	
ETHION	NG/L	20.	35000.	(G)
GUTHION(AZINPHOSMETHYL)	NG/L	N/A	20000.	(B1)
MALATHION	NG/L	20.	190000.	(B1)
MEVINPHOS	NG/L	20.	N/A	
METHYL PARATHION	NG/L	50.	7000.	(A1)
METHYLTRITHION	NG/L	20.	N/A	
PARATHION	NG/L	20.	50000.	(B1)

SCAN/PARAMETER	UNIT	DETECTION LIMIT	GUIDELINE
PHORATE (THIMET)	NG/L	20.	2000. (B3)
RELDAN	NG/L	20.	N/A
RONNEL	NG/L	20.	N/A
AMINOCARB	NG/L	N/A	N/A
BENONYL	NG/L	N/A	N/A
BUX (METALKAMATE)	NG/L	2000.	N/A
CARBOFURAN	NG/L	2000.	90000. (B1)
CICP (CHLORPROPHAM)	NG/L	2000.	350000. (G)
DIALLATE	NG/L	2000.	30000. (H)
EPTAM	NG/L	2000.	N/A
IPC	NG/L	2000.	N/A
PROPOXUR (BAYGON)	NG/L	2000.	90000. (G)
SEVIN (CARBARYL)	NG/L	200.	90000. (B1)
SUTAN (BUTYLATE)	NG/L	2000.	245000. (D3)
VOLATILES			
BENZENE	UG/L	.050	5.0 (B1)
TOLUENE	UG/L	.050	24.0 (B4)
ETHYLBENZENE	UG/L	.050	2.4 (B4)
PARA-XYLENE	UG/L	.100	300. (B4)
META-XYLENE	UG/L	.100	300. (B4)
ORTHO-XYLENE	UG/L	.050	300. (B4)
1,1-DICHLOROETHYLENE	UG/L	.100	7.0 (D1)
ETHLYENE DIBROMIDE	UG/L	.05	.05 G)
METHYLENE CHLORIDE	UG/L	.500	50. (B1)
TRANS-1,2-DICHLOROETHYLENE	UG/L	.100	70. (D5)
1,1-DICHLOROETHANE	UG/L	.100	N/A
CHLOROFORM	UG/L	.100	350. (A1+)
1,1,1-TRICHLOROETHANE	UG/L	.020	200. (D1)
1,2-DICHLOROETHANE	UG/L	.050	5.0 (D1)
CARBON TETRACHLORIDE	UG/L	.200	5.0 (B1)
1,2-DICHLOROPROPANE	UG/L	.050	6.0 (D5)
TRICHLOROETHYLENE	UG/L	.100	50. (B1)
DICHLOROBROMOMETHANE	UG/L	.050	350. (A1+)
1,1,2-TRICHLOROETHANE	UG/L	.050	.60(D4)
CHLORODIBROMOMETHANE	UG/L	.100	350. (A1+)
TETRACHLOROETHYLENE	UG/L	.050	10.0 (C2)
BROMOFORM	UG/L	.200	350. (A1+)
1,1,2,2-TETRACHLOROETHANE	UG/L	.050	0.17(D4)
CHLOROBENZENE	UG/L	.100	60. (D5)
1,4-DICHLOROBENZENE	UG/L	.100	1.0 (B4)
1,3-DICHLOROBENZENE	UG/L	.100	130. (G)
1,2-DICHLOROBENZENE	UG/L	.050	3.0 (B4)
TRIFLUOROCHLOROTOLUENE	UG/L	.100	N/A
TOTAL TRIHALOMETHANES	UG/L	.500	350. (A1)
STYRENE	UG/L	.05	140. (D5)